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Public Ownership in France

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The question of Public Ownership, called in France the *étatisation* or the *municipalisation* of Public Utilities, has been to the fore in that country for the past quarter of a century. The Government, Parliament, and public opinion have been continually examining the subject, and in recent years interesting experiments have been made in this field.

In France, for more than a century, the State has had the monopoly of certain great industries. This monopoly was constituted either for fiscal reasons, in order to bring large sums of money into the public treasury, or for reasons of public safety, in order to strengthen the military position of the country. In this connection I will not take up the Post Office, which, under the ancient régime, was farmed to a company of financiers and which, since the end of the eighteenth century, has also been a Government monopoly—the system now adopted in most countries. To the Post Office was, later, united the telegraph, and, some twenty-five years ago, the telephone also. In addition to these, the French State also enjoys two other important fiscal monopolies—the manufacture and sale of tobacco and matches.

The first of these two monopolies, tobacco, is more than a century old, having been taken over by the State at the very beginning of the nineteenth century. In accordance with its stipulations French agriculturalists may not raise tobacco except in certain special cases and then in a very small number of departments. Furthermore, they must be provided with a Government permit, and the cultivation is supervised by the agents of the fisc, who enumerate the plants, count the leaves, and then buy the crop at a price fixed by the Government. The tobacco, whether raised in France or bought abroad, is manufactured in a limited number of factories owned by the State, whence it is sent to depots under Government directors, where it is finally distributed among the retail dealers, some 30,000 in number for the territory of France, who are appointed by the Government and who sell the different qualities of tobacco at prices authorized by the Government. As these prices are very high, the monopoly turns in a large sum to the national treasury. The gross receipts reach in round numbers 500,000,000 francs, netting 400,000,000, the total expenses being only about one-

fifth of the sale price. The French people are now accustomed to this monopoly—in operation for over a hundred years—having been established in France at a moment when the consumption of tobacco was very small and the production still smaller, for nearly all the tobacco was imported. The enormous fiscal advantages derived from this monopoly also tend to render it less unpopular, though complaints are common concerning the bad quality of French Government tobacco, and because the retail dealers have not always in stock the exact kind of tobacco wanted by the purchaser, who, knowing that he will have to wait several days to get what he asks for, accepts what is offered. A graver inconvenience came out in 1910 and 1911. In addition to the monopoly of tobacco, the Government is also the only producer of nicotine. Now it so happens that nicotine is very efficacious in destroying insects harmful to certain plants and fruits. During the two years just mentioned, the Mediterranean portion of the French vineyards was attacked by a species of scale insect which would penetrate into the grape and devour all the juice. So the viticulturalists suddenly needed a large quantity of nicotine with which to fight this insect. But on account of the routine and lack of suppleness which always characterizes Government enterprises, the required amount of nicotine could not be furnished. The result was that the grape crop was very short and the viticulturalists lost several tens of millions of francs.

The Government match monopoly is less important. It has existed for only some thirty years and brings into the State Treasury about 40,000,000 francs gross, or about 30,000,000 net, the sale price being about quadruple the cost price. Every Frenchman and every foreigner visiting France knows the exceedingly bad quality of the French Government match. Sometimes you have to strike a half-dozen before one will light. In 1910 the Government tried to stop the making and the sale of vest-pocket tinder-boxes, even taking legal proceedings against those who sold them or used them. The pressure of public opinion, however, stopped this, and the Government had to content itself with putting a high duty on them. Before the match industry became a monopoly several millions' worth of French matches were exported annually; but the business is now completely dead. The same thing is true of the

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tobacco industry; though the Government sells 500,000,-000 francs' worth of tobacco to its own citizens, its export trade is next to nothing.

Powder for the army and navy, as well as for mining and sport, is another Government monopoly in France. The aim in this case is not financial; but a pretended military and national interest was given out as the reason for this monopoly when it was established at the beginning of the nineteenth century. The system has always been a cause of much complaint from the mining interests and sportsmen. Leaving the army and navy out of the account, the Government sells the French public from twenty-two to twenty-three millions' worth of powder a year. The terrible disasters in the French navy—when the ironclad *Jena* was blown up, and but a few years later the *Liberté*—are attributed by a deeply moved public to the bad quality of the powder in the ships' magazines. An official investigation has revealed the most crying abuses and the greatest negligence in the management of some of the Government powder depots. In fact, the pressure of public opinion has led the Cabinet and Parliament to examine the question of what restrictions can be placed on the Government manufacture of powder, and has brought about the authorization, under certain conditions, of the manufacture and sale of powder through private enterprise.

Though the French State has not made a monopoly of the building of war-ships and the furnishing of all the necessary supplies, still a large part of this work is done in the Government yards, which give permanent work to some 30,000 men. In 1908 Senator Poirier, of the Finance Committee of the Upper House, made a report on the working of these State arsenals.* These potent facts concerning the French State industries have often been pointed out to Parliament, and especially to the Senate, by M. Antonin Dubost, now President of that distinguished body.

It is not superfluous to say here a few words about one of the most recent French State monopolies—the telephone. The complaints under this head are universal. In the first place, the tariff is very high—400 francs, or nearly \$80 a year in Paris, the aim of the State being to get out of it as much as possible—40,-000,000 francs gross. But this is not the only thing to criticize. The apparatus is antiquated and the employees incapable. As a rule, it takes many minutes to get a communication in Paris, and when you would converse with other cities, even when they are not far apart, the best plan is not to try.

* In my volume *Collectivisme*, fifth edition, pages 673 to 685, I have examined this report in detail; but suffice it to give here one single sentence, a résumé of the whole: "In the military posts and arsenals the waste of the public funds is simply beyond imagination."

As regards wireless telegraphy, the subject may be dismissed in very few words: it is *going to be* a State monopoly, too, and so the French public does not yet enjoy the benefits of this new discovery.

Another and very striking example of the mediocre ability of the State in industrial matters is furnished by the Public Printing Office. This institution came under Government control before the Revolution of 1789, and at first was devoted exclusively to the printing of works in the Oriental languages for which private concerns had neither the type nor the knowledge, so there was ground for such a plant. But little by little during the nineteenth century the functions of the National Printing Office were extended until it became transformed into an ordinary printing establishment doing all sorts of work, and doing it in such a wasteful manner that the whole subject has been brought before Parliament. The height of the scandal was reached when it was decided to reconstruct a part of the building of the Printing Office, this work to cost, according to the original estimates, 2,700,000 francs. At the end of 1910, however, it was found that 12,000,-000 had already been spent and 5,300,000 more would be required to complete the work, making a total of 17,300,000 instead of 2,700,000 as originally called for. That is to say, the work was going to cost more than six times what had been stated in the estimates. So an official investigation into the whole general management of the Public Printing Office was set on foot, when it was found that for the 1,300 printers employed, there were 172 officials and superintendents of one kind and another—that is, one for every eight workmen. Among these officials, 135 belonged to the director's department alone, one for less than every ten workmen, whereas in a private establishment of the same importance there would be one for every thirty-four workmen—that is, four times less.*

If we take up the State railway system of France we find all these shortcomings on a still larger scale. Prior to 1875, there were no railways of this kind in France. The plan generally adopted in France has been a concession to a private company for a period of ninety-nine years. For some of these companies a little more than half of the concession has now expired, and for others nearly one-half. At the end of this period of ninety-nine years—that is, between 1950 and 1960 for the principal companies—the railways will revert to the State, which does not mean, however, that the State will have to take over their management. The State can then make a new concession on more advantageous terms for it and for the public, because if not all, at

* *Journal Officiel*, November 25, 1910; *Journal des Débats*, November 26, 1910.

least the largest part of the capital used for the building of the roads will have been liquidated by the redemption, which the companies make every year, of a part of their shares and bonds. In France the State originally aided in the building of its railway system by moderate money subventions and by guaranteeing the payment of the interest on the capital used for the building of the secondary lines. The development of traffic and of net profits has generally made it unnecessary for the companies to have recourse to this plan of guaranteed interest, and the principal companies have already paid back, or will eventually be able to pay back, the sums advanced by the State for this purpose.

Thus, in the original plan of the French railway system the State took no part in the management. About the year 1875, circumstances threw into its hands a line which at first was not of very great importance; some small companies in the western part of France, between Bordeaux and Nantes, failed or got into financial difficulties, and the State, in order to preserve the shareholders from complete ruin, did what was not at all necessary—bought up the line belonging to these small companies, and instead of passing it on to a large and flourishing company decided to manage the line, at least provisionally. But this temporary arrangement finally became a permanent one, and gradually the line was lengthened until it reached Paris, so that there came to be in western France a line linking the capital with Bordeaux and Nantes. This line, known as "the old State railway," is now about 3,000 kilometers in length, thus forming about a sixteenth part of the total length of the whole French railway system. The running of this road is very expensive. Its net revenues do not represent two per cent. on the invested capital. It has had some terrible accidents of late, costing the lives of scores of passengers. The last one was due to the bad condition of a bridge over the Loire; the weakness of this bridge had been common report for a long time.

In 1908 the State added to its small system a much larger network of railways by taking over the important Western Company, which controlled the roads of Brittany, Normandy, and some neighboring departments, and which, starting at Paris, had as termini the seaports of Havre, Cherbourg, Brest, and Nantes. This system embraces about 6,000 kilometers and brings up the total of the State roads to 9,000 kilometers, or nearly a fifth of the whole French system of railways.

For a long time the Radical party, which has been in power in France from 1898 to 1911, inclusive, has favored the policy of taking over the railways and having them managed by the State. This was one of the planks of the Radical platform as far back as 1889. The Conservative party, on the contrary, has always opposed this idea. The Ministers of Finance of the

Third Republic, who have left the best names—M. Léon Say and M. Maurice Rouvier—always combated the proposal, whose financial and economic consequences they held would prove to be most disastrous. In 1908 the Clémenceau Cabinet, in which M. Caillaux was Minister of Finance and M. Barthou, Minister of Public Works, took over the management of the Western Company in the name of the State, notwithstanding the almost unanimous disapproval of the measure by the representatives of the region directly affected and the protests of nearly all of the French Chambers of Commerce. The bill was carried through the Chamber of Deputies without much trouble, but in the Senate it required a threat of a Cabinet crisis to obtain the small majority finally secured; and during the debate these ministers just mentioned repeatedly assured the recalcitrant senators that the transaction would cost the French Treasury nothing, that it would be an *opération blanche*, as the net receipts of the lines would cover the indemnity which had to be paid the company. Now, the State began its management in January, 1909—that is, four years ago, long enough for us to draw some conclusions. And what is the result?

The State management of the Western Railway has been from the very start, and continues to be, a great financial and technical disappointment. For the first two years the whole line was in absolutely chaotic condition. The trains were never on time and the worst possible accidents were continually happening, whereas under the old management not a single passenger had been killed in ten years. After many experiments, the new management was forced to reduce the number of trains and cut down the speed of the principal ones. To-day the technical side is better than it was at first, but not better than it was under the old company. The financial results, however, could not be much worse than they are, and are a great load on the State Treasury.

In the year 1908, the one preceding the operation of the road by the State, the old Western Company had a net deficit of 27,000,000 francs, and consequently, in accordance with the plan then in force, the company borrowed from the State this sum with which to pay the interest on its bonds and shares. In 1909, the first year that the State had control of the roads, this deficit rose to 38,500,000 francs, and continued to rise as follows during the succeeding years: 1910, 58,500,000; 1911, 71,250,000; 1912, estimated, 84,500,000, and 1913, estimated, 90,000,000 in round numbers. While I am writing these lines M. Chéron, Deputy and a former Assistant Secretary, publishes a report on the subject in the name of the Budget Committee of the Chamber of Deputies. He belongs to the Radical party, but has to admit that the figures of the estimated deficit

for the year 1913 are "very disquieting," and adds that the estimated deficit for 1912, as well as that for 1913, is largely attributable to salaries of the employees, the increase under this head being 52,000,000 francs since the State took over the road. M. Chéron declares that he is "not accusing anybody," doubtless because he knows it would be no good. He says he might be willing to accept an increase in salaries and wages, but points out that there is an excessive augmentation in the number of employees. Here are his exact words on this point: "As regards the increase of the personnel, it seems to me the administration has been rather large. But the same thing is true of all the departments." And then he concludes with these words: "In this matter of the augmentation of the personnel, I understand it has reached the maximum." This reflection of an out-and-out Radical Deputy is very characteristic. In the Government offices, at least in France, there is always a tendency to over-increase the number of the employed. But in this way more citizens are made happy, and the party in power fares better at the elections.

Thus, as we have seen, the trial of State ownership in France is directly against that system, and consequently public opinion is now completely opposed thereto, especially enlightened, as it now is, by the financial and other shortcomings which have followed the State operation of the Western Railway. It may be regarded as certain that, notwithstanding the seventy Socialist Deputies in the Chamber, it will be a good many years before another French Minister of Finance will venture to propose the State taking over another railway.

The municipalization of city public utilities, such as street-lighting, motive power, tramways, etc., has not gone far in France, though it has many supporters not only among our Socialists, but also among our Radicals. As most of the concessions for gas, electricity, water, and the street-passenger traffic expired in the early years of the twentieth century, it might have been thought for a moment that the Paris Municipal Council would have municipalized these different services. But nothing came of the very artificial movement in that direction set on foot by the Radical Socialist party. On the contrary, the Paris Municipal Council has, during the last fifteen years, made new concessions to private companies in different forms and for varying terms of years in the matter of all the services just mentioned. This is a notable fact, for it was done though municipalization was advocated by a large and influential group in the Council.

The concession which had been enjoyed for three-quarters of a century by the Paris Gas Company expired in 1905. But the Paris Municipal Council declined to assume the responsibility of directing that industry. It preferred the system by which it became simply "an

interested party"—that is, the gas-works belong to the municipality, but the making of the gas is done by a company which furnishes the working capital and which shares the profits with the city. In accordance with this arrangement, the city may end the concession every five years by giving the company two years' notice; that is to say, the city is bound for seven years. The first period of five years expired in 1910, without the city making use of this right, so that the present arrangement will last at least until 1915; and everything points to its continuing even longer, especially as the Municipal Council elected in 1912 for four years is friendly to the present arrangement. In fact, at the moment of writing, the city of Paris is negotiating a loan of 200,000,000 francs with which to enlarge its present gas-works and even to build new ones to be run under the present concession.

A similar arrangement—that of "an interested administration"—exists with the General Water Company, and in 1910 the city renewed this arrangement for a very long period.

Some thirty years ago concessions, beginning with a period running from 1882 to 1889, were granted to a half-dozen companies, each being given a fraction of the city, called a *secteur*. These concessions had to do with electricity, heating, lighting, and motive power, and all will expire in 1914. Five or six years ago the Paris Municipal Council united all the *secteurs* and conceded the city's electricity and motive power for a period of twenty-six years—that is, from 1914 to June 30, 1940—to a large financial group called the Paris Company for Electrical Distribution. In the matter of electric lighting and heating, this company has a monopoly; but as regards electric motive power the Municipal Council reserves the right to permit other companies to furnish electric power to the city. Within the last few months a grant of this kind has come up for consideration, so that in this matter of electric power it is highly probable that the city of Paris will adopt a competitive system.

In the matter of urban passenger traffic, the municipality has had recourse also to the concessionary system under different forms and conditions. There are in Paris two distinct subway companies, the older and more important being the Metropolitan, whose concession is for forty years after the opening of the last portion of the road. The city assumes all the cost of tunneling, the company making the roadbed, building the stations, furnishing the rolling-stock, and running the road. It gives the city one-third of the gross receipts and a certain portion of the increased traffic when it surpasses a fixed figure. The second subway company, the North-South, has made a different arrangement with the city. The company does all the work of construction, the city simply approving and supervising

the plans and their execution and sharing in the profits, this share being based on the number of passengers carried. This concession is for seventy-five years.

And lastly, the city renewed three or four years ago for periods of fifty years, with large shares in the profits, its concessions to all the tramway, omnibus, and auto-bus companies.

Thus, from 1900 to 1910, inclusive, the Paris Municipal Council has been handing over to private companies under varying conditions for periods extending to 1943 and even to 1980, all the urban public utilities—electricity, water, and passenger traffic, as well as gas, on a somewhat different plan as explained above.

This system of concessions to private companies, producing a considerable reduction in the prices paid formerly by the public for its utilities and offering the city considerable participation in the profits, is now both favorably received by Parisians and very advantageous to the city treasury. In the case of long concessions, the municipality has reserved the right, on certain conditions, to take over the utility at the end of a fixed time, generally after a lapse of ten or fifteen years. But in the present state of mind of the municipality and Paris public opinion, it is not probable that the city will exercise this power. The public especially approves of the plan by which the city participates in the profits derived from the concessions. At the recent municipal election in May, 1912, the question of the municipalization of public utilities or of the city exercising its reserved right of taking over any of them was not brought up at all, and almost every one of the candidates for re-election who favored this system was successful at the polls. If one or two of these were defeated, it was due to quite other and personal reasons.

As I have already said, this system is very beneficial to the Paris treasury. For instance, during the year 1910 it brought in 83,000,000 francs, of which 34 to 35 millions were from gas, 27 to 28 from water, 18 from the subway, and the rest from electricity. The last item is sure to increase rapidly and considerably. It is true that these 83,000,000 francs must meet the interest on large loans which the city was forced to have recourse to in order to carry through some of these enterprises. But it is safe to say that interest and amortizements do not represent more than one-half of the sums which the city receives from these sources; and these sums are sure to increase gradually and notably. I estimate that, toward the middle of the present century, 150 or perhaps even 200 million francs will be the minimum sum which the city will derive from these urban utilities under the present arrangement, of which sum at least one-half, if not three-fifths or two-thirds, will be net profit.

In the matter of urban utilities, most of the cities of

France have copied Paris more or less closely. The exceptions are those towns where the municipal council is Socialist or Collectivist; in which cases some of the utilities, especially that of lighting, have been municipalized. But these are rare exceptions in France, and the experiment has not, as a rule, been a success. The city of Elbeuf, for example, offers almost a tragic case. A few years ago the municipal council and the mayor decided to municipalize the gas, and announced their intention to extend this plan to various other industries. But their initial step proved most disastrous, and the municipal gas company was run at a marked loss to the city treasury. The mayor, who represented his town in the Chamber of Deputies, was so affected by the situation and the unpopularity in which he fell, that he actually committed suicide. His death was followed by a new election, when the victorious municipal council immediately leased the city gas interests to a private company.

As a result of all this, municipalization is not in good odor just now in France. A very striking proof of this has recently been furnished. In consequence of the widespread complaints over the increased cost of living, the Caillaux Cabinet brought in a bill authorizing the Paris municipality to establish butcher-shops and bakeries. But public opinion was so opposed to this project that the Poincaré Cabinet, which succeeded the Caillaux Cabinet, promptly withdrew this bill.

It is true that the city of Paris has decided in principle to call for a loan of 200,000,000 francs for constructing or aiding by loans, the construction of cheap working-men's homes; and that the Government has introduced a bill to enable French towns in general to do this same thing. But the bill provides that the towns must, as a rule, come to an arrangement with some co-operative or ordinary stock company to whom will be loaned, at a low interest, the funds necessary to build these houses. So the general idea of the bill is that the municipalities will neither construct nor manage these houses. Even the Minister of Labor, M. Léon Bourgeois, who belongs to the advanced Democratic party, has concurred publicly in this view.

I repeat, therefore, that State ownership and operation of public utilities, that municipalization, that the participation of the departments or public authorities of any kind is in disgrace in France, the final blow to the system having been given by the lamentable failure, still in progress, of the Western Railway management. And I may add that a careful study of the nature and working of the modern State and public bodies to-day, especially in wholly democratic countries, shows that reasons of the highest theoretical gravity add their weight to those of a practical kind in favor of the rejection of the idea of State operation of public utilities of any sort. But my contradictors may point to

Germany, and especially to Prussia, as a proof that the State can operate creditably great railway systems. My reply is that Germany and Prussia are in no respects democratic countries; that Prussia is not even a Parliamentary one, subject to electoral servitude and to the instability of elective administrations. The Prussian bureaucracy is very strongly organized, quite independent of Parliament, an autonomus body in no way influenced by the sudden changes of the outside world. Furthermore, we must take into account the German character, and particularly the Prussian character, full of discipline and deeply imbued with the military spirit and functionary pedantism. In other countries, where these conditions do not exist, State railways are far from being above criticism. In Belgium, for instance, which is, however, a very industrial and prosperous, as well as a very calm and sensible nation, the State operation of the railways has given rise in Parliament to very severe and well-founded criticisms. In this connection I need simply call attention to the recent Parliamentary report of M. Hubert, who has been several times Minister. So strong is the blame in this document that it places the operation of the Belgian roads very much below that of private companies, and especially below that of the French Northern Company, which operates a system similar to those of Belgium. M. Hubert even goes so far as to suggest that it might be advantageous to lease the Belgian roads to one or more companies. Political reasons oppose such a radical change as that, but the mere fact of it being proposed condemns the State management of the Belgian railway system.*

The weakness of State administration in such matters springs from the very nature of our modern contemporary governmental forms. As a general thing, State functionaries advance by age, and even when promotion comes through special choice the fortunate officeholder owes his success largely to the fact that he has served faithfully for many years. It is safe to say that almost never does a State functionary get to the top before he is 50 or 55, often even 60, years old. In big private concerns, on the contrary, you often find important posts filled by men between 35 and 42 or 43 years of age, which is a great advantage to these companies, for energy, decision, and initiative are generally dulled toward 60, and especially so beyond that year. Again, the State officeholder is governed by very narrow rules from which he cannot escape; he has no initiative and is subject to a jealous control. Then there is State accounting, often very niggling; credits parsimoniously accorded which cannot be promptly increased, however necessary and however much such an increase would be

to the public good. A State functionary is always hampered, and when the unexpected happens his position is not to be envied. There is much more red tape in State accounts than in those of private companies, with the result that every State enterprise is weighed down by routineism. Another cause of the inferiority of State functionaries arises from their not being able to share in the pecuniary success of the business which they direct. Their salary, which is always very modest, remains stationary, whatever the profits of the business may be. A salary of from 25,000 to 35,000 francs is considered very high in the French official world. In a recent Parliamentary report the idea was put forward that no officeholder should be paid more than a deputy or senator—that is, 15,000 francs a year. But in big private concerns the managers come in for a large share in the profits. I know cases where engineers from 35 to 45 years old, and directors of insurance companies, receive regularly from 120,000 to 200,000 francs annually. Small salaries tend to produce inertness in those who receive them, while salaries that grow with the progress of the business have the contrary effect.

But this does not close the list of circumstances which oppose the operation of public utilities by the State or municipalities. In our modern democratic countries the Government and public men are beset by election considerations. Officeholders are always thinking of the elections, and are, furthermore, subjected to the whims of the politicians, who can either turn them out of office or prevent their advancement. The result is that the State officials, whatever their grade may be, are not free agents in matters electoral. The Government in France does not hesitate, on the eve of an election, to send officials a circular letter ordering them to support the Government's candidates. The consequence is that the liberty of choice at the ballot-box, and, therefore, political liberty, is sadly infringed upon in a country and among a people where the central Government enjoys extensive powers. The transferring of officials to another post and their dismissal on account of political hostility or even lukewarmness is a common occurrence in France.

Germany furnished recently a striking example of Government pressure, though of a somewhat different character from those just mentioned. I refer to the Prussian Government stopping all orders of railway material from the Graffenstadten works in Alsace, for the openly declared reason that this concern had at its head a director who was unfriendly to Germany. The company was given clearly to understand that this policy would be continued so long as this objectionable person remained at his post. After some hesitation the board of directors removed him. This pressure from a Government operating an important railway system is not always exercised in such a bold fashion, but it makes itself felt almost always either openly or secretly.

* I go into this report in detail in the fourth edition of my book *L'Etat Moderne et ses Fonctions*, pages 258 to 268. Paris: Librairie; Félix Alcan.

The consequence is that here again the political liberty of the citizen is infringed upon.

There is an objection of still another sort, and a very grave one, against State ownership of public utilities. To meet the demands of one kind and another which they entail, the Government is obliged to be continually borrowing. But repeated loans depreciate public credit, so that in a grave crisis a Government finds it difficult to obtain loans necessary to the very life of the nation. Many examples of this might be given. Take Russia, for example. Before the outbreak in 1904 of the Russo-Japanese War the Tsar's Government took over the larger part of the railways and began operating them, which greatly increased the country's debt; for the Government, to meet this expense and make the necessary extensions, was obliged to negotiate a big loan almost every year, the result being that at the moment of the commencement of hostilities, the debt had attained 16 or 17 milliards of francs. The defeats came and then the credit of Russia collapsed. The public of England and France recalled that even in peace times the Russian Government was forced to borrow annually, but it was not remembered that this money was for the building of railways. So the Russian 5 per cents. fell below 80. There can be no doubt that if Russia had not squandered so many milliards in buying and building railways, but had left all this to private companies, her debt would have been less and the moral effect produced by this immense total would have been less harmful. It required four or five years after the peace for Russian credit to recover itself, and during that period the Government could borrow only on very hard terms and could not renew the rolling-stock of her railways or go on with their extension. But if the roads had been in the possession of companies with shareholders in France, Belgium, and Holland, for example, the money would have been easily found. In fact, the Russian Government has been compelled to hand back to private companies a large part of its roads in order not to be obliged each year to go abroad seeking money and thus weaken still further its foreign credit.

A similar but less pronounced example of this same thing is furnished by Germany. It cannot be denied that Germany is a prosperous country, and its situation both at home and abroad appears to be very solid. Yet the German public funds are relatively low, considerably below the French. The difference is relatively enormous, and there is a tendency for it to go on falling. In 1898 the German 3 per cents. were only 5 or 6 points below the French 3 per cents., the average figure of the first being 95 and the second 100½. But in June of the past year there was a difference of 14 points, the German 3 per cents. being quoted at 79 and the French 3 per cents. at 93½. Several reasons have been advanced to explain this difference, but it seems to me that the principal one has been overlooked. For twenty

years France has asked no public loan, the French Government, until the taking over of the Western Railway in 1908, abstaining from any large scheme requiring a great amount of capital, whereas the German Government, and especially the Prussian Government, owning and operating the State railways, have been obliged and are still obliged to borrow every year in order to better the existing lines and to construct new ones. The result is that the French public funds have never been brought into competition with new loans, while the existing German public funds have to meet, and are still meeting every year, the competition and pressure occasioned by these new issues of Government bonds. In fact, this singular situation has come to pass: German public funds are now lower than those of Italy, Switzerland, and even Norway. At the end of last June German 3½ per cents. were selling at 90, while Italian 3½, notwithstanding the war with Turkey, the uncertainty as to how it will end, and the expenses occasioned thereby, were worth 97.80; Swiss 3½, 91 and 92; and Norwegian 3½, 91 and 93. This depression in the public funds of Germany might also be partly attributed to the expenses of the navy, but the fact remains that if Prussia and the German States were not burdened with the construction and the operation of the railways of the country, the German Empire would not be asking at every moment for money and its credit would not stand so low as it does.

It is a source of unquestionable strength for a nation to have good credit, especially at the moment of some great crisis which may come at any hour. At such a time those who have money to lend, knowing that the French 3 per cents. have stood for more than a quarter of a century in the neighborhood of par and even above, would be more disposed to subscribe to a public loan required by the circumstances of the moment and at a rate that would not be a burden to the country. Our fine position in this respect has, however, been somewhat marred since we took over and began operating the Western Railway. In order to extend its system, the Government this present year has had to borrow 300,000,000 francs, and this will have to be repeated in the immediate years to come; so this loan, with the 8 to 9 million to follow, will unquestionably have a weakening effect on French credit. Though these new bonds are of a different sort from our 3 per cents., the latter have already declined 2 per cent. and are now vacillating.

I need not dwell longer on this question of State ownership. From the point of view of pure political economy there can be no question that it is an evil. Nor is the conclusion less positive when the matter is considered from a sociological, a political, or a financial point of view.

PAUL LEROY-BEAULIET

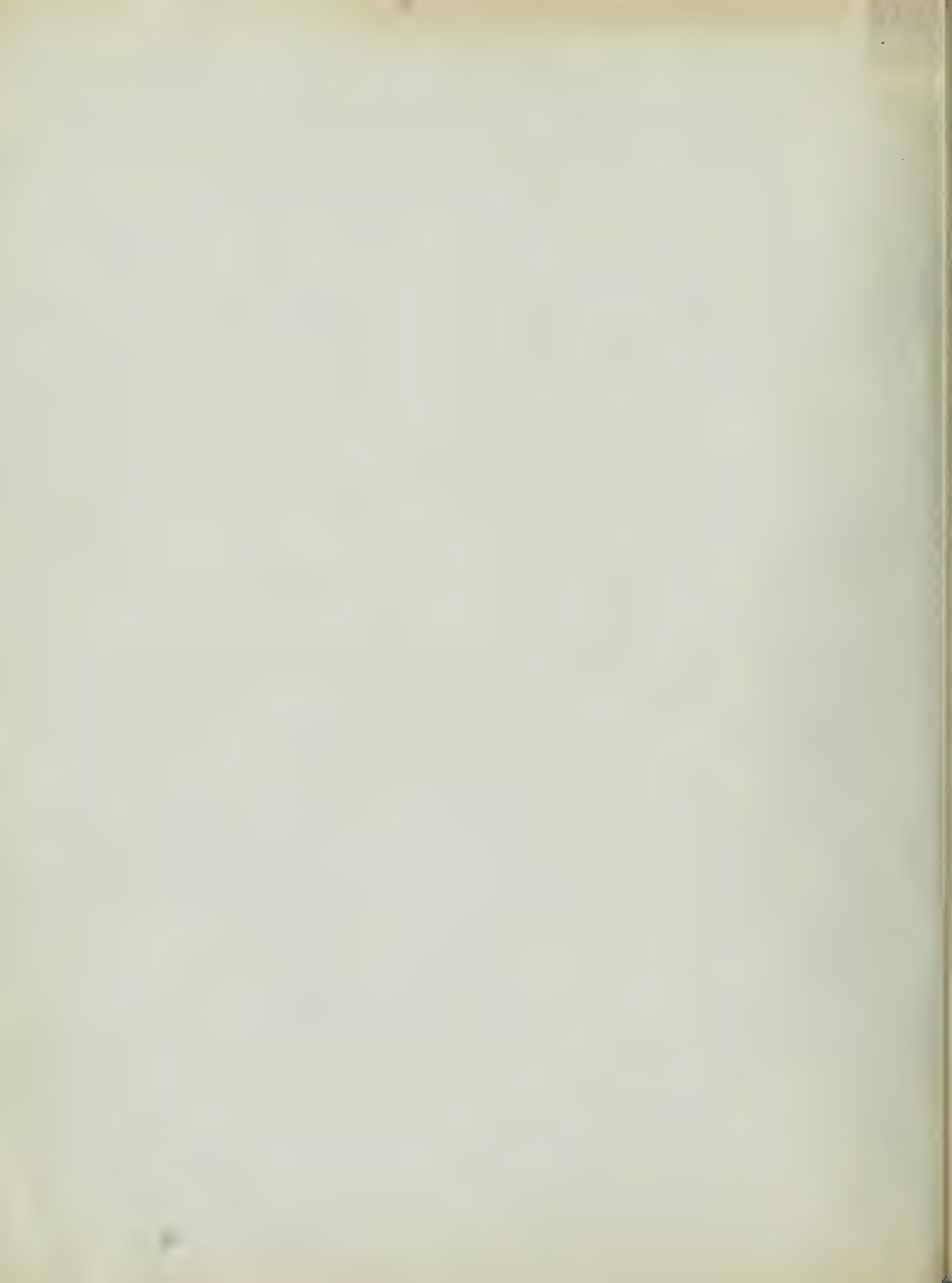
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*Answer to Telegrams on 10/10/15. Copy
Brief of arguments against public ownership
10/10/15*

EXTRACTS
FROM THE
REPORT OF THE ROYAL COMMISSION
APPOINTED TO INVESTIGATE THE
POSTAL, TELEGRAPH AND TELEPHONE SERVICES
OF THE
COMMONWEALTH OF AUSTRALIA



*136838
14/9/15*



EXTRACTS FROM REPORT*

1. We, your Commissioners, appointed by Letters Patent dated the 22nd of June, 1908, to inquire into and report upon the Postal, Telegraphic, and Telephonic Services of the Commonwealth, and more particularly in relation to the following matters:—

- (1) Management;
- (2) Finance;
- (3) Organization, including discipline;
- (4) Extensions in country districts, and particularly in remote or sparsely-populated parts of the Commonwealth;
- (5) Complaints in relation to the services;

have the honour to report that we entered upon our inquiry in July, 1908, but were prevented from holding continuous investigations through the intervention of Parliamentary business.

2. The inquiry occupied 228 sittings, and your Commissioners visited every State and took evidence at all the State capitals, and at Fremantle and Kalgoorlie, Western Australia, and at Launceston, Tasmania. Personal visits of inspection were made to all the General Post Office buildings, and many branch telephone exchanges, and suburban post-offices of Sydney and Melbourne.

* * *

DEFECTS IN MANAGEMENT.

Defects in management and system.

9. Your Commissioners, during their inquiry into the management of the Post and Telegraph Department, discovered defects which were due to lack of efficient management as distinct from the system of control, and also defects which were inherent in the system. In framing this Report endeavours have been made to broadly separate the defects of system from those of management. It is evident that an inferior system, even under sound management, would make for an indifferent service. When, however, an inferior system is associated with a weak and limited management, the results are disastrous.

* * *

Central Executive responsible for congestion.

32. Your Commissioners consider that the Central Executive in neglecting to exercise ordinary foresight by making the necessary provision to meet the demands of the public when the telephone rates were reduced in 1907, and in failing to profit by the experience of other countries in similar circumstances, is responsible for the congested state of the telephone service, and the consequent overworking of the officers of the Department. The evidence discloses that the reductions in the telephone rates were made on the advice of a subordinate officer, and in opposition to the advice of the Permanent Head and Chief Electrical Engineer, and your Commissioners consider that the then Postmaster-General took action without having any sound reason for the drastic reduction made.

* * *

Reductions opposed by Permanent Head and Chief Electrical Engineer.

*The extracts are an exact reprint from the official Report, which was ordered to be printed, October 5, 1910. The Postal, Telegraph and Telephone services in Australia are all under the administration of the Postmaster-General of the Commonwealth.—Ed.

DEFECTS INHERENT IN THE SYSTEM OF CONTROL.

Ministerial Control.

Continuity of policy.

40. In the administration of the Commonwealth Post and Telegraph Department it is desirable, in the interests of the public, that continuity of policy should be maintained. The Central Executive attempted to formulate a definite policy; but it was alleged that a continuous policy could not be exercised by the Department because of its incompatibility with frequent changes of the Ministerial Head. There have been nine Postmasters-General since the inauguration of the Commonwealth, and the evidence discloses that most of the Ministerial Heads endeavoured to effect alterations of policy. Ministers are apparently anxious to signalize their occupancy of office by some new and distinct act of administration; but due regard does not appear to have been paid to the effect of such actions. The baneful influence of

Baneful influence of Ministerial Head.

ill-considered interference in administration by the Ministerial Head is strikingly illustrated by the alteration of the telephone rates in February, 1907, by the Minister of the time, in opposition to the advice of his administrative and technical officers. The disregard of the effects of such drastic innovations is detrimental to the carrying out of a continuous and definite policy, even if formulated by the Central Executive. There also seems to

Interfering with details.

have been a strong inclination on the part of the Postmasters-General to give too much consideration to, and interfere with, details, instead of confining themselves to the broader principles of administration. Your Commissioners consider that it is impossible for a Minister to obtain a reasonable grasp of the affairs of a Department of such magnitude as the Post and Telegraph Department, even with a longer tenure of office than has hitherto been the case. Delays in the execution of administrative duties are also occasioned by the enforced absence of the Minister from his Department on political business. The Post and Telegraph Department is an institution daily affecting almost every individual in the community to a greater extent than any other Government Department in the Commonwealth, as it provides public utilities of paramount importance. It supplies services to the public, the control of which should be independent of political exigencies.

Post and Telegraph Department not to be used for political purposes.

* * *

INEFFICIENCY OF THE SERVICES.

Condition of services when transferred.

44. The evidence clearly discloses that the Department did not keep equipment up to the requirements, this being common to all the States, with the exception of South Australia, where the telegraph and telephone lines were said to be in good order. With the above-mentioned exception, the condition of the services when handed over to the Commonwealth was far from satisfactory. This defect should have been rectified in the early days of Commonwealth control. Since the time referred to, the Central Executive has been continuously forced to neglect new works, and prevented from placing maintenance on an effective basis, mainly in connexion with telegraph and telephone lines and switchboards. This phase of the investigation will be more fully dealt with under the heading of "Finance."

Position getting worse.

45. The starved condition of the services is largely answerable for the imperfect working of the telephonic and telegraphic installations. Evidence was received that the position was getting worse, owing to the increased volume of business making the adverse conditions more accentuated, but recent action is remedying that condition to some extent.

Alleged want of funds.

46. The reason assigned by all the officials for the failure to place the services in proper working order was want of sufficient funds. There is evidence that the Department in 1901 endeavoured, through the Treasury of the

time, to obtain the necessary funds to place the services in an efficient condition by resorting to a loan, but Parliament refused to sanction this proposal. The curtailment of funds at that period was apparently the result of the desire to keep the cost of Federation within a limit of £300,000 per annum. The adoption of that course, in spite of the demands of the Post and Telegraph Department, is, in the opinion of your Commissioners, evidence that the system of management is faulty, in that it permitted the Treasurer to assume financial control of services for whose efficiency he was not responsible. This aspect of the position is emphasized by the fact that the Treasurer was at that time aware of the necessities of the Post and Telegraph Department, notwithstanding which he returned to the State Governments the whole of the surplus revenue beyond their constitutional proportion. In this connexion it would appear that the Postmaster-General was too complaisant in respect to the actions of the Treasurer. The Central Executive, though representing to the Postmaster-General the omission to supply sufficient funds, should have more persistently urged upon him the results that would occur from a continuation of the starvation policy. This matter will be further dealt with in the financial section of this Report.

Effect of curtailment of funds.

Postmaster General too complaisant.

* * *

FINANCE.

FINANCIAL POSITION OF THE DEPARTMENT.

66. Your Commissioners experienced considerable difficulty in procuring satisfactory and definite information in regard to the financial position of the Commonwealth Post and Telegraph Department. This was evident, not only in connexion with the Central Executive, but was further emphasized when close examination was made of the principal officials in the States. These officials stated that they were unable to provide the requisite information because the State Post and Telegraph Departments did not issue balance-sheets. No attempt in this direction has been made under Commonwealth control until quite recently. This inability to supply definite financial information is a severe reflection on the Department for not providing that primary essential of effective control—a proper system of accounts.

No reliable data obtainable.

67. In their endeavours to obtain the necessary particulars your Commissioners requested the Department to furnish certain returns to enable them to draft an approximate balance-sheet. The Department has complied with the various requests made in this direction, and, in addition, furnished a return (Parliamentary Paper, No. 41, 1909), prepared by order of Parliament, containing certain detailed information. This return was confined to the year 1907, but, beyond conveying a general impression that the Postal Branch of the Department was a profitable section, and that losses were incurred in the telegraph and telephone services, it is not of much value in disclosing, even approximately, the financial position of the Department.

Return furnished.

Return not of much value.

* * *

70. The Department furnishes annual statements showing only revenue receipts from its chief branches, and the total expenditure, including new works, for all branches of the service. Such statements are absolutely useless for the purpose of supplying the requisite information to determine the financial position of its several branches.

Annual statements useless.

* * *

82. Your Commissioners therefore conclude that the Department's unsound financial position is due to the fact that telegraphic and telephonic services are rendered at rates which do not return revenue sufficient to cover all charges against capital account, and working expenses.

Telegraph and Telephone rates too low.

* * *

PURCHASE OF MATERIALS.

103. Insufficiency of funds prevents the Department in all the States from holding reserves of materials. The Chief Electrical Engineer, the States' Electrical Engineers, and other responsible officers, complained of the want of reserve stocks. So far as construction materials are concerned, the Department has been working in a most primitive manner, exhibiting an utter disregard of ordinary business methods, and entailing a cumbersome and expensive system of purchase. Your Commissioners recommend that six to nine months reserve stock should be held.

Disregard of ordinary business methods.

* * *

CONDITION OF TELEPHONE SERVICES.

115. The result of unduly curtailing expenditure was pointed out repeatedly by the Department, and the required provision was made on the Estimates, but was reduced by the Treasurer. The longer reconstruction is deferred and the longer installation of a new system is postponed the more expensive the work becomes, on account of extensions made to the old system. Construction methods were found to be practically the same as in 1901, as the Department claimed it had been impossible to improve those methods since that date, although the adoption of improved methods would obviously have tendered towards economy. It may be mentioned that between 1886 and 1904 the New York Telephone Company's plant was reconstructed three times to bring the equipment up to the highest standard, and to render the service more efficient. From 1900 to 1907 the Bell Telephone Company, United States of America, spent about £70,000,000 on telephone undertakings.

No improvement in construction methods.

* * *

NEW SOUTH WALES.

119. The telephone aerial wires and cables in the city and suburbs of Sydney are seriously congested, and further undergrounding is necessary. Sufficient funds and trained staff are not available for this purpose. The magneto switchboard at the Central Exchange, Sydney, for flat rate subscribers is out of date. Your Commissioners also found that the great demands made upon it impaired its efficiency. On the new common battery board there is sufficient accommodation for all measured service subscribers, but not for all subscribers. There are not enough transfer lines between the common battery board and the magneto boards in the Central Exchange. More junction lines are required with branch exchanges.

Impaired efficiency.

VICTORIA.

120. The Victorian telephone service was found to be in the most unsatisfactory condition of any in the Commonwealth. In Melbourne the switchboard and instruments were obsolete. The Chief Electrical Engineer stated that he knew of only one other system in the whole world which was in a similarly antiquated condition. The switchboard was condemned twenty years previously, at the time when the State Government took over the service from the private company which conducted it. The technical experts reported at that time that metallic circuits and undergrounding were necessary; but the State Government did not provide the funds requisite for the purpose. The deplorable condition of the Melbourne telephone service when transferred to the Commonwealth is evident from the fact that at that period the Electrical Engineers' Committee estimated that it would cost £226,000 to place the service in an efficient condition. Although since Federation attempts have been made to improve the service by the provision of additional junction lines, extra attendants, and new instruments at subscribers' premises,

Antiquated switchboard.

Condition deplorable.

the funds provided are stated to have been inadequate even to extend the old system, much less to replace it with a proper system. The evidence disclosed that the Melbourne Telephone Exchange and lines were in much the same condition as in 1901, the only difference being that the network was larger, and, therefore, more expensive to reconstruct. Recently steps have been taken to put the service in an efficient condition, and a common battery switchboard is now in course of erection, and undergrounding of lines and provision for metallic circuits are being proceeded with.

* * *

TELEPHONE TRUNK LINES.

125. In all the States necessary extensions of trunk lines were stated to be delayed through insufficiency of funds.

* * *

ORGANIZATION, INCLUDING DISCIPLINE.

215. Your Commissioners desire to state that the bulk of the evidence presented during the course of the investigation related to Organization. Under this section are included all the ramifications of the Service, extending from the office of the Central Executive to every State Branch and sub-branch. In addition to examining witnesses, your Commissioners made personal inspection of the accommodation and the working conditions in the General Post Office and other Post Offices in each State. The responsible officers of the Department stated that the branches were insufficiently staffed, and alleged that under existing conditions it was impossible for the Department to render a thoroughly efficient service to the public. The evidence disclosed the existence of an abnormal amount of discontent within the Department. Your Commissioners consider that a sound system of organization is impracticable without an effective system of management, together with highly competent support in the States' branches. It is also requisite to provide proper working conditions, and ample and well arranged office accommodation, in order to secure the necessary facilities for the efficient transaction of public business, and to enable thorough supervision to be exercised.

Discontent in service.

* * *

PUBLIC COMPLAINTS IN RELATION TO THE SERVICES.

1058. Notifications were issued to members of both Houses of the Commonwealth Parliament, and to Municipal Councils, Chambers of Commerce, Chambers of Manufactures, and Stock Exchanges throughout the Commonwealth, to the effect that any associations or public bodies desirous of tendering evidence would be afforded an opportunity of doing so. In addition to associations or public bodies which availed themselves of this opportunity, representatives of commercial firms in several States volunteered evidence.

Evidence invited.

1059. The following is a recital of the principal complaints received:—

NEW SOUTH WALES.

Evidence was tendered in this State by representatives of Sydney commercial firms, the Farmers and Settlers' Association, the Country Storekeepers' Association, the Country Press Association, the Typographical Association, and statements were received from a number of Municipal Councils, to the following effect:—

General evidence received.

General.

- (1) There is an absence of a business-like system, occasioning circumlocutory methods in the Department.

Complaints stated.

- (2) Excessive centralization exists and causes delays in public business.

* * * * *

- (5) Insufficiency of staff causes delays in replying to public inquiries and complaints.

- (6) There is a want of discipline among junior members of the staff.

* * *

Telephones.

- (38) The Sydney service is unsatisfactory, and delays occur in the exchange.

* * *

VICTORIA.

1060. Evidence was received in this State from the Chamber of Commerce, Melbourne, the representative of the Amalgamated Society of Engineers, and certain shipwrights formerly employed by the Department, to the following effect:—

- (1) There is an absence of business methods in the Department.

- (2) Errors occur in the sorting and delivery of letters which display carelessness and lack of discipline.

* * * * *

- (4) The Melbourne telephone service is most unsatisfactory.

- (5) The Department employs untrained fitters at less than standard rates.

- (6) Pole dressing is executed by non-tradesmen.

* * *

SOUTH AUSTRALIA.

1062. Evidence was tendered in this State by the representatives of the Adelaide Chamber of Manufactures, and an Adelaide commercial agent, and statements were received from the Importers' and Agents' Association of Port Adelaide, and several country municipal councils (*vide* Appendix XXXI. to the *Minutes of Evidence*).

The main complaints received were as follows:

- (1) More business-like management and decentralization are necessary.

* * * * *

- (7) Telephone service, Port Adelaide, is most unsatisfactory.

- (8) Telephone service between Adelaide and Port Adelaide is very bad.

* * * * *

WESTERN AUSTRALIA.

1063. Evidence was submitted in this State by the representatives of the Chambers of Commerce at Perth and Fremantle, the Superintendent of Fire Brigades at Perth, and by several Municipal Councils, to the following effect:—

* * * * *

- (9) The telephone service at Fremantle is most unsatisfactory.

* * * * *

- (18) Telephones are not efficiently inspected.

* * * * *

TASMANIA.

1064. Evidence was received from the representatives of the Chambers of Commerce at Hobart and Launceston, and a Hobart commercial agent. Statements were submitted by several country Municipal Councils. The complaints made were as under:—

- * * * * *
- (15) The telephone service at Launceston is very unsatisfactory.
 - (16) Tasmanian trunk line services are bad.
 - (17) Telephone service at Devonport is unsatisfactory, and not private.
 - (18) Telephone facilities in country districts are insufficient.
- * * * * *

1071. Your Commissioners consider that the number and magnitude of the complaints received indicate the existence of strong dissatisfaction among the public with the Postal, Telephone, and Telegraph services. Your Commissioners are of the opinion that the bulk of the complaints made were entirely justifiable, and are convinced that to obtain an efficient service it is essential that improved methods of Management, Finance, and Organization be promptly adopted.

Complaints justifiable.

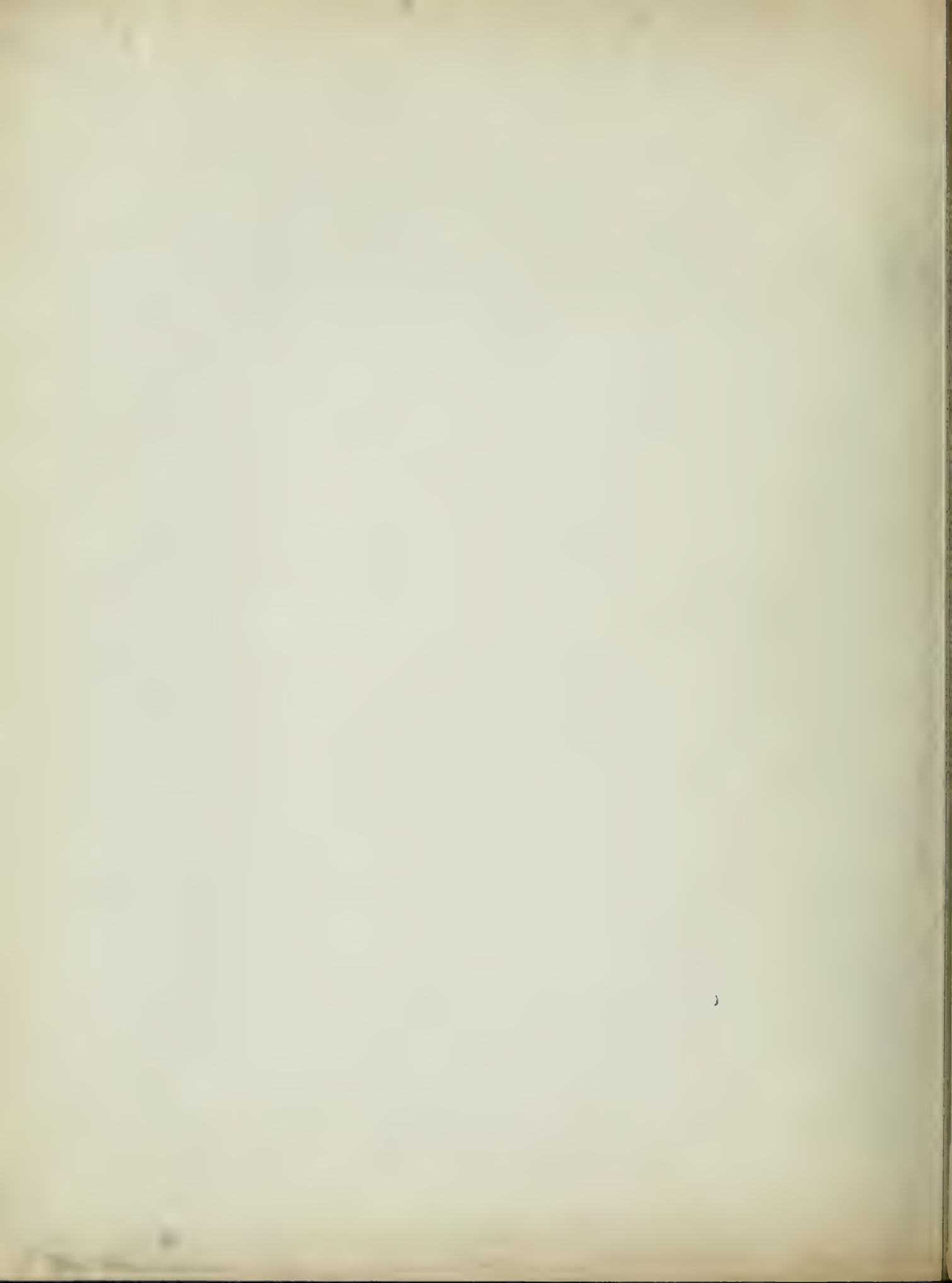
We have the honour to be,

Your Excellency's most obedient Servants,
WILLIAM H. WILKS, Chairman.
HUGH de LARGIE.
D. STORRER.
WILLIAM WEBSTER.

Parliament House,
Melbourne, 30th September, 1910.







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Telephone Memoranda

A Few Facts *and* Opinions Foreign *and* Domestic



In response to an inquiry, Theodore N. Vail, President of the American Telephone & Telegraph Company, made this statement December 19, 1913:

Our telephone system has been the study of investigators from many countries. It has been considered the world's model, not because it is the largest, but because it gives the best service and is more useful to the public than any other system.

Such success as we have achieved has come from our study of facts and our willingness to be guided by them. We have not endeavored to sell our telephone system to the government for the reason that the facts as we have gleaned them during the last thirty years from all parts of the world, have not justified such a course.

Our people are personally familiar with every telephone system that today exists. The telephone experience of Japan or France, is as closely studied as the experience of one of our American cities.

We have freely given our aid to make the government systems in foreign lands as good as possible, believing that every advance in the art helped us to advance. We have never found any foreign subscribers as well served as our subscribers, nor any foreign public receiving greater advantages from the telephone than the American public.

We recognize our responsibility to the telephone-using public, which is practically the whole public, and for that reason favor an intelligent, painstaking, thorough, scientific study of the proposals for public ownership. We cannot be content if facts which we know to exist are carelessly ignored. But if all the facts are discovered, understood and exploited, we are bound to be content with a decision based on those facts.

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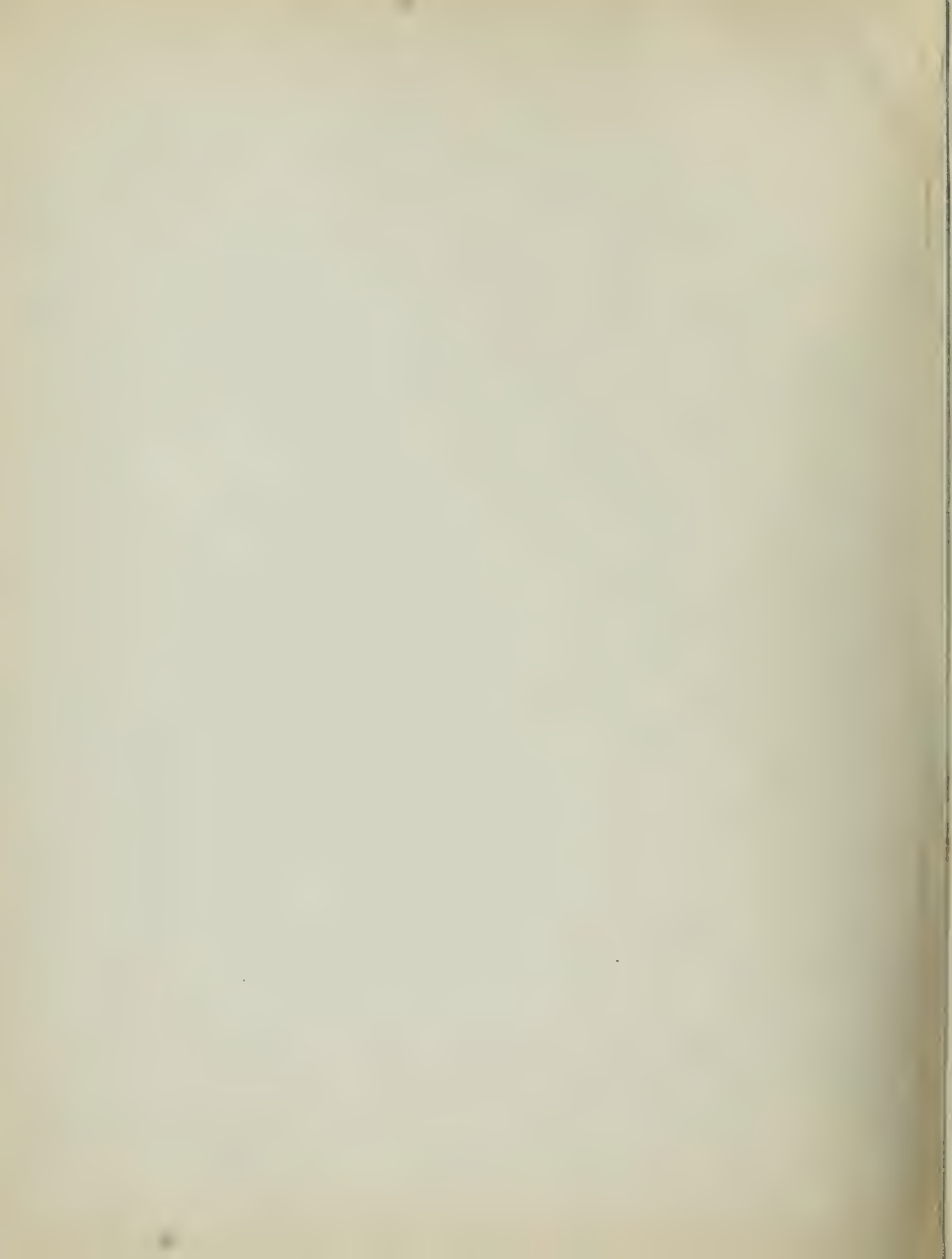
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AMERICAN TELEPHONE AND TELEGRAPH COMPANY —

(Comp.)

Information Department

NEW YORK





OUTLINE

Public Sentiment

	Pages
<i>Foreign</i>	9
<i>American</i>	9-11

Public sentiment in Great Britain, the product of costly experience, is now practically unanimous in condemning its Government telephone service; enlightened public sentiment in the United States, as reflected in the press, shows that Americans intend to profit by the experience of other countries, and that the proposal to substitute political management of our telephones and telegraphs, for the highly efficient management of private enterprise, will not be tolerated by our democratic spirit of initiative and self-reliance.

Economic Aspect 11-15

The science of political economy is well epitomized, as to government ownership, in the words of Thomas Jefferson: "Having always observed that public works are much less advantageously managed than the same are by private hands, I have thought it better for the public to go to market for whatever it wants which is to be found there." Economists, from Adam Smith down, emphasize Government's "incompetency as a business agent," and warn us that it is fatal "to multiply the activities of government so as to bring about vexatious interference with liberty or to restrict legitimate enterprise." Although one economist, Prof. H. C. Adams, objected, in 1887, that monopolies, under "private financiering," tend to maintain prices at the highest profitable point, his objection has since been overcome by the institution of public regulation (see "Regulation vs. Ownership"). According to Prof. Adams, only industries of "Increasing Returns" tend naturally to monopoly, and Adams doubted that the telephone is such an industry, as did other economists.

Foreign Experience No Precedent..... 15-23

It is unsound to argue that Americans should adopt Government Ownership merely because many Europeans have adopted it. Conditions differ. An easy-going, Government-ridden European will tolerate much that the impatient, exacting "we-want-what-we-want-when-we-want-it" American would not tolerate a minute. The American's ideal of service is different: quality first, with as reasonable a price as possible, rather than cheapness first, with what service cheapness will buy. Political systems differ; long tenure of office in Europe permits greater efficiency and continuity of management; public officials in America are turned out of office just as they begin to "learn the ropes." Despite such advantages as European governments may possess, their experience with Government Ownership of telephones and telegraphs has not been such as to recommend it to this country.

Arbitrary and Irresponsible Administration

<i>Foreign (Official)</i>	23-24
" (<i>Editorial</i>)	25-26
<i>American (Official)</i>	27
" (<i>Editorial</i>)	27-28

"From Government there can be no appeal." Private companies are subject to complaints, but governments are subject only to petitions. Under Government Owner-

ship the public finds itself practically powerless to obtain relief from abuses. (See "Regulation vs. Ownership.") Government employees, protected by a rigid civil service, possess little eagerness to please the public. The heads of private companies must account strictly to the stockholders and the public for the funds invested in the enterprise, but governments are notoriously irresponsible in accounting for public funds, so that taxpayers—unlike stockholders of a corporation—have no exact means of finding out what is done with their money. Private concerns are strictly liable for damages to persons and property; public bodies limit liability, or evade it altogether.

Comparative Efficiency

<i>Official</i>	29-30
<i>Editorial</i>	30-34

Government management is never so efficient as private. It is handicapped by inertia, red tape, and uncertain tenure of office among the executives. Private employees work less by the clock than holders of government jobs. Their initiative is not circumscribed by definite limitations. Their inefficiency is not coddled by political influences. Results, in the field of telephones and telegraphs, amply bear out the superior efficiency of private management, both as to economic operation, and the extent and quality of service.

Service

<i>Foreign (Official)</i>	35-38
" (<i>Editorial</i>)	38-42

In point of service, there is no comparison between the government managed telephone of foreign countries, and the privately operated telephone in the United States. Only Americans who have traveled abroad fully appreciate why foreigners envy us our privately operated telephone service. The delays, mismanagement and general inadequacy of Government telephones in Europe are illustrated by numerous instances. Government telegraphs are equally uninviting. The only telegraph service abroad comparable with our own is that known as "preferred" or "urgent", for which double and triple rates are charged. The bulk of European telegrams are "ordinary", and (*e. g.* on the Continent) must wait their turn—often for hours—before despatched.

Rates

<i>Foreign (Official)</i>	42-45
" (<i>Editorial</i>)	45-48
<i>American (Editorial)</i>	48

The familiar cry of "cheap rates" under Government Ownership is misleading. Government Ownership is no panacea for rates: foreign Government telephone systems are constantly harassed by rate dissatisfaction, which is aggravated by political pressure. The doctrine "Political might makes right", renders impossible a fair and equitable adjustment of rates under Government Ownership. Governments do not operate as cheaply as private companies, and can not give cheaper rates without cheapening the product (service), or producing a deficit. Deficits must be met by taxation, which means a borrowing from Peter (the taxpaying non-user, who is apt to be poor, being a non-user), for the benefit of Paul (the subsidized user, who is generally in better circumstances than the non-user). While, in some cases, foreign telephone rates are cheaper than in the United States, it can be conclusively demonstrated that the average charge for telephone service abroad is greater than in this country, when the same units of measurement are used, notwithstanding that in the United States, service—in quality and extent—is immeasurably superior, purchasing power of money less, and employees' pay about twice as high. Telegraph rates, where length of haul and speed of service are comparable, are less in the United States than abroad (See "Service").

Expense

	Pages
<i>Foreign (Official)</i>	49-51
" <i>(Editorial)</i>	51-52
<i>American (Official)</i>	52-53
" <i>(Editorial)</i>	53-54

To purchase the telephone and telegraph systems in the United States, the Government would have to double its national debt. It would then acquire, not a financial asset, but a liability, unless it raised rates or lowered service (See "Comparative Efficiency"). None of the foreign systems are known to produce a profit. Many produce heavy deficits. The Post Office is comparatively simple and inexpensive to operate, yet annual deficits force it to the public purse for support. The infinitely more complex and intricate management of telephones and telegraphs would impose a far greater drain upon the public exchequer, which would invariably find its way to the taxpayer's pocket (See "Rates" and "Taxation").

Mismanagement

<i>Foreign (Official)</i>	54-56
" <i>(Editorial)</i>	56-58

From the fact that what is everybody's business is generally nobody's, that governmental machinery is designed for governing rather than for commercial administration, that "the state has to submit to too many influences other than the needs of the public," that continuous service of officials and thorough familiarity with their work—the essentials of efficient management—are impossible under political administration, mismanagement of Government telephone and telegraph systems has followed inevitably, as instances from foreign experience strikingly illustrate.

Stagnation vs. Expansion

<i>Foreign (Official)</i>	58-60
" <i>(Editorial)</i>	60-62
<i>American (Editorial)</i>	62-63

The contention that Government Ownership makes for "social utility" by serving profitable and unprofitable communities alike, is not supported by the facts. The United States, with 5.5% of the world's population, has 65% of the world's telephones. Europe, with its Government-owned systems, has four times the population of the United States, but much less than half the number of telephones. The British Postmaster General refuses to extend telegraph service to points where it will not pay. European Government Telephone Departments have exploited the larger and more profitable communities, and comparatively ignored the smaller and unprofitable ones (See page 60). The true situation is, private telephone and telegraph systems serve a country far more universally than Government systems, because lack of commercial incentive under Government operation breeds stagnation, whereas the watchword of private enterprise is expansion. "Creative epochs in industry are the work of individuals, not of Governments."

Financial Constriction

<i>Foreign (Official)</i>	63-64
" <i>(Editorial)</i>	64-65
<i>American (Editorial)</i>	65

The high standard of American telephone service is largely the result of proper financing. Plans laid ten and twenty years in advance have been rigorously backed up by

the necessary investment. The money spent has at all times equalled the money needed to maintain the best service possible. Government systems, on the contrary, have suffered from financial starvation. Governments are incapable of consistent financing. Plans are no sooner completed, than they are swept away by new administrations with new plans. Appropriation bills are framed less with an eye to what is required, than to what can be obtained. The appropriations voted are governed less by the commercial needs of the service, than by the political needs of the moment.

Taxation

<i>Foreign (Editorial)</i>	65
<i>American (Editorial)</i>	66-67

Government cannot create something from nothing. Its bills must be paid by the taxpayer. Any increase in government expense increases the taxpayer's burden, and adds that much to the "high cost of living." Should the Government spend a billion dollars on telephones and telegraphs, the taxpayer would have to foot the bill. Unless it increased telephone and telegraph rates, the Government would have to run at a loss (See "Comparative Efficiency"), which would mean an annual expense item to the taxpayer, for the benefit of a new army of Government job-holders. (See "Expense.") A lowering in rates would be but a new form of class legislation: The very poor could economize on telephones and telegraphs, but not on telephone and telegraph taxes. (See "Rates.") The public debt has been increasing by leaps and bounds: why magnify the burden?

Employees

<i>Foreign (Official)</i>	67-68
" <i>(Editorial)</i>	69-73
<i>American (Official)</i>	73-75
" <i>(Editorial)</i>	75-76

Government employment appeals mainly to those who are willing "to mortgage one's better prospects and potentialities in the boundless world of individual endeavor," for easy positions with small responsibility. Nevertheless, experience shows that Government is not a model employer. It overpays incompetents whose only asset is political "pull," and underpays the meritorious. It recognizes seniority rather than ability. Experience, foreign and American, shows that the Government lags far behind private enterprise in treatment of employees, not only as to pay for services rendered, but as to pensions, compensation for injuries, and general conditions of employment.

Political Aspect

<i>Foreign (Official)</i>	77-79
" <i>(Editorial)</i>	79
<i>American (Official)</i>	79-86
" <i>(Editorial)</i>	86-92

Foreign officials admit that in their administration of telephones and telegraphs, their hands have been tied by partisan influence, and their services debilitated by political contamination. United States Congressmen admit that the "merit system," in the making of appointments, has been "prostituted to politics." In the United States, bosses are far more strongly entrenched, political machines far more potent, and partisan influences far more pernicious, than in Europe. A new government enterprise, especially of such magnitude as the telephone or telegraph, would furnish new strength to the boss, new fuel for the political machine, new fields for partisan influence. It would weigh down civic reform with an added handicap, and might permanently engraft upon our democratic institutions a system of centralized bureaucracy, "a huge political Frankenstein, created by Democracy for its own eventual destruction."

Regulation vs. Ownership

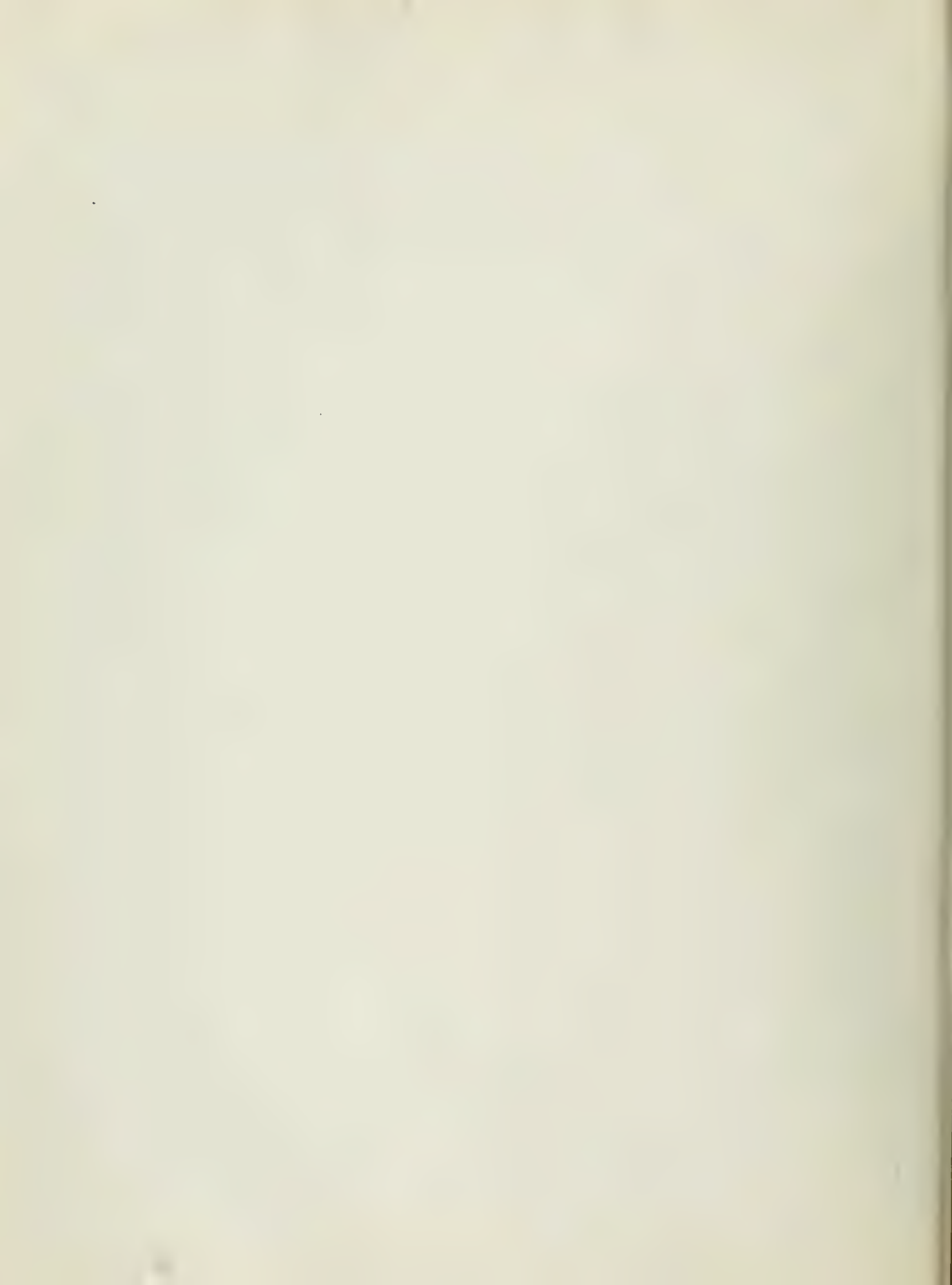
	Pages
<i>Official</i>	92-93
<i>Editorial</i>	93-96

Public Regulation secures to the public all the advantages of private ownership, and eliminates its disadvantages. The Government is in a better position to regulate and check abuses of private corporations, than to regulate and check its own. For example, it has rigidly enforced strict standards of accounting among private corporations, though its own accounting is notoriously lax and inadequate. (See "Arbitrary and Irresponsible Administration.") It would be the height of folly to embark upon Government Ownership just when Government Regulation is beginning to show what it can do.

Post Office

<i>Official</i>	96-98
<i>Editorial</i>	98-102

Government management of the Post Office is no precedent for Government operation of telephones and telegraphs. The postal service is unique in its simplicity of make-up and ease of operation; despite which it meets with annual deficits, even though millions in expenses annually incurred by the Post Office, are charged to other departments. Its administration by the Government in this country has revealed defects which, in more complex enterprises, would be fatal alike to good government and good service. The argument that the parcels post is a precedent is equally unsupportable. It involved no change in the nature of Post Office work, but merely increased its volume, throwing the brunt of the added load upon private carriers.



PUBLIC SENTIMENT

(Foreign)

The Times, London, England, November 2, 1913:

The chorus of complaints against the London telephone service which has echoed through our columns during the past week will, it may be hoped, serve as a corrective of the prevailing official satisfaction with the British system.

The Times, London, England, May 18, 1912:

The experiment of the Manitoba Government with interior grain elevators seems to have resulted in failure. * * * In a speech in the Legislature, the Hon. R. P. Roblin, Provincial Premier, explained that the Government embarked upon the experiment as the result of a long popular agitation in which it was represented that the grain dealers were robbing the farmers and that "the panacea is to be found in Government-owned elevators." He added, "I took the voice of the demagogue as the voice of the public, and I consequently made a mistake."

The Daily Mail, London, England, February 5, 1912:

The complaints of telephone users grow in force as they accumulate in numbers. Every class of the community is represented in the increasing army of disgusted subscribers, and if a small percentage of the complaints which pour into the office of the *Daily Mail* are duplicated to the newly formed Telephone Users' Association that organization will find its hands more than full.

One indignant user asks what would be the advantage to the community of the nationalization of the railways, land, and mines if the new telephone system is an example of efficiency under Government control. Several subscribers write that complaints to officials only draw stereotyped acknowledgments. Apparently the replies are suggested by that useful post office volume "The Excuse Book."

The Daily Mail, London, England, February 2, 1912:

The widespread dissatisfaction with telephone services, expressed in many letters in the *Daily Mail* recently, has led to the formation of a Telephone Users' Association, with Mr. Goldman, M.P., as chairman.

The Daily Mail, London, England, February 1, 1912:

Many complaints about the inefficiency of the telephone service continue to reach the *Daily Mail*. The Post Office may say that the staffs and the system are the same as they were under the National Telephone Company, but the fact remains that subscribers are almost unanimous in stating that since the Post Office took over the telephones there has been a marked decline in their efficiency.

(American)

Washington, D. C., *Herald*, January 5, 1914:

If the voice of the press of the country affords any clue to public sentiment, the people of the country have pronounced with practical unanimity against Mr. Burleson's proposal.

Paterson, N. J., *Press*, December 24, 1913:

The press of the country without discrimination of party, has with practical unanimity declared the project (i. e., the proposal for government ownership of telephone and telegraph) untenable.

Brooklyn, N. Y., *Citizen*, December 11, 1913:

There are so many other matters which will have to be dealt with before it can become worth while entering into any detailed argument over what had better be done about the telegraph and telephone lines that the question must remain in the academic list on this side of the Atlantic for another decade at least.

It is, indeed, true that there are not a few intelligent people who think otherwise. They have become convinced in various ways that it would be a good stroke of business to enter these fields right away. But it is not doubtful that the great majority of the American people are in no such mood. The complaints of the two services have been so few and are really so trivial, as compared with other great branches of industrial life that call for attention, that the average American, who is nothing if not practical, declines to bother himself much in the premises.

Philadelphia, Pa., *Ledger* (Quoted in the Rochester, New York, *Post Express*, October 8, 1913):

For Federal regulation of interstate concerns the nation will vote its indorsement. For government ownership the nation will vote only its stoutest condemnation.

Rochester, N. Y., *Union Advertiser*, December 19, 1913:

We do not believe that the people want government ownership of the telephone, the telegraph or the transportation service. The present laws for the regulation of the public service corporations seem to be adequate.

Baltimore, Md., *American*, December 16, 1913:

It may also be said that the control of the wires by the government would be a precursor of conditions such as exist in France, where the labor organizations have the telegraph and telephone employes of the government in their fellowship and thus have the government in important respects under their thumb. All this leads to outright socialism. The United States wants none of it.

Pontiac, Mich., *Press*, December 23, 1913:

Wouldn't the acquisition of telegraph and telephone lines pave the way for the government ownership of railroads? Would the service be any better than it is now and could the government operate these industries without loss, or friction, or political interference? Wouldn't there be many problems from which we are now free? In brief, is there a public demand, a public necessity, for such a step, and would it be advantageous to the government and the public to undertake, in these circumstances, a move in a direction that may be wrong? Mr. Burleson seems to be confident, but as we see it, is on very uncertain ground.

St. Paul, Minn., *Dispatch*, October 9, 1913:

Even a Congress of radical Democratic persuasion would gag at the thought of plunging the country into a system which is unsuccessful abroad and from which the three leading foreign nations would gladly escape if they could enjoy the benefits of modernized American services.

Jacksonville, Ill., *Courier*, December 19, 1913:

We are justly jealous of the extension of government activities, and we have not as a nation felt called on to do for the people what other agencies could do as well.

Chicago, Ill., *Journal*, December 22, 1913:

The best thing about the peaceful dissolution of the telegraph and telephone trust is the evidence it affords that President Wilson has no intention of adopting the suggestion of his postmaster general, and moving for immediate government ownership and operation of telegraph and telephone lines.

* * * * *

The country is to be congratulated on the very evident fact that his recommendations are not to be followed.

Buffalo, N. Y., *Enquirer*, December 22, 1913:

Those who question the wisdom of government ownership merely as a business proposition, however, are only a part of the array in opposition. Another very strong corps of objectors hold that running telegraph and telephone systems is not suitable work for the United States government.

Mansfield, O., *News*, February 5, 1914:

The more closely this policy is examined, the more hopeless does it appear. The question, of course, is a political as well as a business one. If we desire a great, powerful, centralized Government we can go far toward the realization of our wish by putting it in charge of the railroads and other business enterprises. By so doing, we shall greatly weaken, and perhaps destroy, those very institutions designed by wise men to hold despotism in check and to safeguard the independence, initiative, and freedom of the citizen. We should have an army of voters bound to the state—that is, the administration—by the closest and most selfish ties, and strong enough to mold it to their purposes.

* * * * *

Men are, we believe, beginning to see the dangers inherent in this whispered program. Many who in their hearts oppose it and shrink from it, have made the mistake of talking and thinking of it as "inevitable." Nothing is inevitable as long as there is the slightest chance of preventing it. Those who are proposing to "accept" what they think they can not head off, ought, we think, to express themselves clearly and forcibly. We believe, as we have said, that public opinion, as a whole, is far from favorable to this plan. It is a grave mistake to interpret silence as acquiescence.

Syracuse, N. Y., *Journal*, December 18, 1913:

There is no general demand for the Federal government to buy the telegraph lines. There is no great necessity for such an act. Widespread as is its use, necessary as it has become in business circles and great as is its convenience in the home, it has not yet reached that place in the affairs of man where Uncle Sam should feel even the suspicion of a need to take over the mighty system in order that he might furnish cheaper service.

ECONOMIC ASPECT

Speech of Representative Lewis on Telephones and Telegraphs before Congress on December 22, 1913:

Mr. Speaker, there is a science of political economy; it speaks with an authority, not to say with a thoroughness of analysis and breadth of view, which I could not claim. It speaks, too, with a responsible sense, a knowledge of these perplexing varieties and complexities of modern society and industry.

From statement made by Thomas Jefferson in 1808:

Having always observed that public works are much less advantageously managed than the same are by private hands, I have thought it better for the public to go to market for whatever it wants which is to be found there.

From "The Wealth of Nations," by Adam Smith (1776, Vol. II, Bk. V., Ch. II, p. 300:

The Post Office is properly a mercantile project. The government advances the expense of establishing the different offices, and of buying or hiring the necessary horses or carriages, and is repaid with a large profit by the duties upon what is carried. It is perhaps the only mercantile project which has been successfully managed by, I believe, every sort of government. The capital to be advanced is not very considerable. There is no mystery in the business. The returns are not only certain, but immediate.

From "Principles of Economics," (1911, Volume II, Book VII, Chapter 62, Page 409), by F. W. Taussig, Professor of Political Economy at Harvard University:

The continued progress which it (i. e. government ownership) should maintain calls for keenness, vigor, enthusiasm, single-minded devotion to professional tasks on the part of trained administrators and experts. Only an intelligent and self-restrained democracy, or a very capable autocracy, can enlist such men and get them to do their work in the best spirit. The German Empire and the German states, in their post office, telegraph and telephone, perhaps in their railways, unmistakably in their military organization, have maintained a high spirit of ambition and emulation. But the Australian colonies seem to have secured simply humdrum management; honest, to be sure (and for this much we in the United States, to our shame, must pay our tribute of respect), but devoid of life and vigor. No democratic community, with the possible exception of Switzerland, has shown in its public industry a spirit of progress comparable to that of private industry.

From an article by Dr. Jacob Gould Schurman, President of Cornell University, published in the *New York Tribune*, February 25, 1912:

In the United States the central government possesses under the Constitution a minimum of governmental functions. Yet even among us the public business is conducted with much less energy and efficiency than private business. Although some European states own and manage the railways—never, however, with great success—we hesitate to invest our government with this function because of its incompetency as a business agent and the inefficiency to which it is doomed by partisan politics.

From "Public Finance," (3rd Edition, 1903, Book II, Chapter 3, Pages 228-229), by C. F. Bastable, Professor of Political Economy at the University of Dublin, Ireland:

One difficulty common to most forms of state industry arises from the necessity of dealing with large numbers of employees. The tasks of the modern State are sufficiently varied and comprehensive to take up all the ability and time of administrators, without adding unnecessarily to their duties. Public industries, however, require for their efficient working a body of organized hands, obtained by free contract. An unavoidable consequence is the possibility of disagreement between the State and its helpers, culminating perhaps in the last weapon of industrial war—strikes. * * * That this is not an imaginary danger is proved by the fact that in July, 1890, there were "strikes" at the municipal gasworks in Leeds, at the London Post Office, and in the Metropolitan Police, and also a "mutiny" in the Guards!

From "Railroad Transportation" (1885, Chapter 13, Page 257), by Arthur T. Hadley, LL. D., President of Yale University:

Government ownership of the telegraph prevailed in Continental Europe, because each country was more or less of a bureaucracy; that is, the civil service governed the country, and was so well organized that it extended itself as a matter of course. In America the civil service is not so well organized, does not govern the country, and is not allowed to extend itself as a matter of course. Political reasons decided the question in favor of a government telegraph in Europe. Political reasons form the main ground against a government telegraph in the United States.

From the preface to "The History of the British Post Office," by J. C. Hemmeon, Ph.D., published under the direction of the Department of Economics, as Volume VII of the *Harvard Economic Studies* (January, 1912):

Possibly a *democratic* type of government should, from the financial point of view, interfere least in the direct management of economic institutions, on account of the pressure which can easily be brought to bear upon it for the extension of such institutions on other than economic grounds. If non-economic principles are to be substituted in justifying the initiation or increase of government ownership, a popular form of government seems the least suitable for the presentation of such as shall be fair to all concerned, not to mention the difficult problem of dealing with those members of the civil service who do not hesitate to make use of their political power to enforce their demands upon the government.

From "The Principles of Political Economy," (1864, 5th edition, Part I, Chapter 9, Pages 218 and 231), by J. R. McCulloch:

Perhaps, with the single exception of the conveyance of letters there is no branch of industry which government had not better leave to be conducted by individuals.

* * * * *

It cannot, however, be too strongly impressed upon those in authority, that non-interference should be the leading principle of their policy, and interference the exception only; that in all ordinary cases individuals should be left to shape their conduct according to their own judgment and discretion; and that no interference should ever be made on any speculative or doubtful grounds, but only when its necessity is apparent, or when it can be clearly made out that it will be productive of *public advantage*.

From "Expansion of Races," (1909, Chapter XXVIII, Page 433), by Charles Edward Woodruff, A.M., M.D:

Hugo R. Meyer, formerly Professor of Political Economy in the University of Chicago, has investigated this matter for many years, * * * He proves conclusively that it is always a disaster to the society if the ruling units take charge of matters which the working units alone are able to do. The delusion is widespread that if government only take charge of something it is done properly, even though it has not the brains or bodies to work with. It is forgotten that the brains of the country are apt to be in the employ of corporations and will not work for the poor pay of government office. The delusion arises in the lower layers of society—the less intelligent ruled elements—which always look up to the rulers to initiate and manage everything for them. It is the Russian peasant's stupid way of demanding everything of "The little father"—the Czar. It is the sign of racial childishness and the opposite of the Aryan democratic spirit. Meyer proves that State ownership or regulation invariably paralyzes industry because it interferes with that private initiative which has made America the leader. * * * In the great public utilities, telegraph, telephone, trolley lines, railroads, lighting power, we lead the world. State management in Europe has paralyzed advancement—individual liberty in America has pushed it.

From a speech by Charles E. Hughes, Justice of the United States Supreme Court and ex-Governor of New York; delivered before the Republican Club of the City of New York, January 31, 1908:

Our government is based upon the principles of individualism and not upon those of socialism.

* * * * *

We do not seek to multiply the activities of government so as to bring about vexatious interference with liberty or to restrict legitimate enterprise. We deprecate all unnecessary governmental action. But our individualism does not justify unbridled license. Its aims may demand, and frequently do demand, the intervention of government with necessary restrictions and regulations, not to curtail the liberty of the people, but to protect it.

From the *Congressional Record*, January 15, 1914, p. 1753:

MR. MOON. * * * If you shall adopt the policy of the purchase of the telegraphs and telephones, you will have proceeded far to the federalization of power. You will have added thousands of offices to your Government. If you should go further and become the owners of the railroads, you would see a vast army of people who would be in control, a Federal menace to human rights and human liberty under a Constitution and laws in which the people have no part in selecting the officers to administer.

Macon, Ga., *News*, December 19, 1913:

John Stuart Mill, one of the clearest and most profound thinkers of the nineteenth century,

applied his practical philosophy to the subject of government ownership, and among other things he said :

A cogent reason for restricting the interference of government is the great evil of adding unnecessarily to its power. Every function superadded to those already possessed by the government causes its influences over hopes and fears to be more widely diffused, and converts, more and more, the active and ambitious part of the public into hangers-on of the government. If the roads, the railways, the banks, the insurance offices, the great joint stock companies, the universities, and the public charities, were all of them branches of the government; if the employees of all these different enterprises were appointed and paid by the government, and looked to the government for every rise in life; not all the freedom of the press and the popular constitution of the legislature would make this or any other country free otherwise than in name. And the evil would be greater, the more efficiently and scientifically the administrative machinery was constructed.

He declared also that the perfection of government ownership would establish an iniquitous bureaucracy.

Philadelphia, Pa., *Public Ledger*, October 26, 1913:

In the new edition of the "American Commonwealth," James Bryce says that the railroads cannot be taken over in this country and worked by the National Government as the railways of Switzerland and many of those in Germany and the Austro-Hungarian monarchy. And he added:

"Only the most sanguine state socialist would propose to impose so terrible a strain on the virtue of the American politician, not to speak of the effect on the constitutional balance between the States and the Federal authority."

St. Louis, Mo., *Times*, December 22, 1913:

Incentive to achievement along individual lines cannot be taken away from a people save to their great detriment. The fundamental principles of Republican form of government are best exemplified by as little government as possible, and not by as much as possible.

San Antonio, Tex., *Express*, December 19, 1913:

The argument that the United States is the only one of the leading countries of the world that is not operating telegraph lines is * * * specious, because this country has a form of government different from that of most of the other great nations, which cost many thousands of lives to establish, and that has been the admiration of all the world. This, the people of the United States will not willingly relinquish for a monarchical or centralized form of government, towards which it might be headed were Mr. Burleson's policy carried out.

Philadelphia, Pa., *Public Ledger*, December 18, 1913:

Mr. Burleson might go further; if communication of intelligence is important, so is transportation of both human beings and freight, and therefore the next logical step would be the ownership of our twenty billions of dollars worth of railways. Transportation of foodstuffs is important, but more important yet is the food. How can a prudent and wary Government permit the nation to be endangered by allowing the farmers and other busy-bodies to retain in their private possession the very staff of life? That would be foolish, of course, and therefore a beneficent paternal Government should, logically, control the means of production as well as the instruments of transportation and of communication. But whence originate the food-stuffs and other necessities of life? From this goodly earth; from the land, which, combined with labor, is the source of practically all wealth: is it safe to leave the land in private hands? Logic—the Burlesonian communistic, socialistic, Texas logic—compels a logical statesman to conclude that the land must be owned, controlled and tilled by the Government.

From "The Science of Finance," by Professor H. C. Adams (1898: Part II, Bk. I, Ch. 2, Pages 274-5):

If it be true, as has been argued in the courts, that an increase in the volume of the telephone

business beyond a certain point necessitates a corresponding increase in expenses, this fact excludes the telephone industry from the class of industries industrially monopolistic.

From "Economics," by Professor A. F. Hadley, President of Yale University (1896, Pages 170-1):

Shall telephone charges be based on the message, as in long-distance business, or on the instrument, as in the ordinary local business? The former is the more logical basis, but it involves decided difficulties. The public, in local telephone exchanges, distinctly prefers the latter method. But if a company charges by the instrument and not by the message, we are brought face to face with the remarkable fact that the expenses per unit increase with an increase in the volume of business done. In a town with only 100 telephones in operation, the expense to the company per instrument and the rate which can be profitably charged is far less than in a city with 1,000 instruments. In the one case, it need only be prepared to make ninety-nine connections for each subscriber; in the other, it must arrange for nine hundred and ninety-nine. This will serve to illustrate the highly experimental character of the problem of rate-making in the newer forms of industry. It is difficult enough for the investors to find agents who can be trusted to experiment with property under these conditions. Still more difficult is it to find public officials who can be trusted to experiment with other people's property.

From "Introduction to Economics," by Professor H. R. Seager, of Columbia University (3rd Edition, 1905, Ch. 23, Legal and Natural Monopolies, pages 450-2):

It (*i. e.* the telephone service) is not subject to the law of decreasing expense. On the contrary electrical engineers maintain, and with apparent reason, that the larger the number of subscribers served through one exchange the larger is the expense per subscriber of rendering the service. This is because the exchange stations must be so arranged that each new subscriber—or pair or quartette of subscribers where two or four party lines are used—may have his wire connected readily by each of the many operators required in a large office with that of any other subscriber. If one operator is able to attend to the calls of fifty subscribers and the office serves one thousand, this necessitates twenty different terminals at the exchange for each wire. If the number of subscribers doubles, each separate wire must be let in at forty points. If five thousand subscribers are to be served, each wire must have one hundred distinct terminals. In this way the expense at the central office increases by multiplication rather than by addition. For five thousand subscribers not five times, but twenty-five times as many connections are needed as for one thousand. Nor is there the saving of expense outside the central office in the telephone business that is to be found, for example, in connection with electric-lighting. For the best service it is necessary to have a distinct wire for each new subscriber. Fair service can be given to two parties on the same line. Four-party lines are less satisfactory. Lines serving more than four have been found to work so badly that they are now little used in cities. Thus as regards outside wiring the expense grows uniformly with the number of subscribers. There are, of course, on the other hand, economies in administration, etc., which result from an increase in the number of subscribers and which must be taken into account. On the whole it appears to be true, however, that increasing rather than diminishing expense is the law of growth in the telephone business.

FOREIGN EXPERIENCE NO PRECEDENT

From "Modern Industrialism," (1904, Part III, Chapter 4, Pages 270-1), by P. L. McVey, President of the University of North Dakota.

What may be accomplished under a monarchy by a centralized government is a markedly different thing from the results likely to come from a government under a democracy. Australia stands as an example of democratic administration. The governments are by no means so free from political influences as those of Germany and do not offer such excellent results. But on the other hand the experience of Australia would be nearer what might be expected in England or America, were the state system introduced rather than that of the German States.

The administration of the Australian railroad is pretty well typified by a statement of Sir George Turner to the effect that no man of the class (naming a number of high grade managers) would leave England to enter the services of an Australian colony. The parliaments have insisted upon the retention of staffs created under political managements of former administrations and have interfered with the transactions of the railroad departments for political reasons. The railroads are starved because of the heavy demands upon the treasury for other purposes, the result is poorly equipped roads carrying small train loads at high cost per ton mile. Expenses are not always paid out of current income and resort is had to borrowing that materially increases the public debt. Demands of all kinds are made by every class, from every section and these are of such a nature that they preclude anything like management on the long-sighted principle; the roads are run for the present and with the future in view. The errors of judgment are not written off as in the case of a private company but are laid upon the taxpayer, whose very industry is burdened by a condition over which he has no control. The results in Australia may be summed up in three brief statements: (1) Systematic borrowing until the State Debt is beyond any reasonable limit; (2) dependence upon the State for employment without reference to the product; (3) reliance upon government borrowing for continuance of prosperity. These in addition to high rates and inefficient management complete the record of the Australian systems.

From "Aspects of Public Ownership," by Sydney Brooks, published in the *North American Review*, August, 1911, Pages 206-207:

Another set of considerations that are even more relevant concern not so much the kind of undertaking that it is proposed to nationalize or municipalize as the kind of people who will have the management of it when it passes under public control--their political traditions and habits, their administrative experience and efficiency, their standards of official honesty, the whole environment and atmosphere in which they will be called upon to discharge their functions. Here, again, it is not possible to lay down any hard and fast rule. But at the same time, it is not merely possible and permissible, but vitally essential to insist that the differences between towns and countries in external circumstances, political formation and character, industrial instincts and administrative aptitudes, are just as great as between individuals, and that these differences profoundly affect the problems of Public Ownership and make it more than usually imperative to submit the argument from analogy to a merciless dissection. Local and national ownership and operation of the chief public services will be one thing in a country, like Germany, where the bureaucratic tradition is strong and individual initiative perceptibly weaker than collective initiative, and another thing in a country, such as the United States, where the best brains are to be looked for outside of the municipal, State and Federal Governments and where the unit has consistently shown itself immeasurably more enterprising and efficient than the group. * * * An enterprise that is conducted successfully and with economy under a stable administrative system may break down altogether under a régime that favors a succession of officials on short or precarious tenures or that is exposed to the unremitting pressure of commercial or political interests.

From "Principles of Economics" (1910, 6th edition, Appendix A, Page 753), by Alfred Marshall, one time Professor of Political Economy at Cambridge University:

In Germany an exceptionally large part of the best intellect in the nation seeks for employment under Government, and there is probably no other Government which contains within itself so much trained ability of the highest order. On the other hand the energy, the originality and the daring which make the best men of business in England and America have but recently been fully developed in Germany; while the German people have a great faculty of obedience. They thus differ from the English whose strength of will makes them capable of thorough discipline when strong occasion arises but who are not naturally docile. The control of industry by Government is seen in its best and most attractive forms in Germany; and at the same time the special virtues of private industry, its vigor, its elasticity and its resource are beginning to be seen in full development there. In consequence the problems of the economic functions of Government have been studied in Germany with

great care, and with results that may be very instructive to English-speaking people; provided they recollect that the arrangements best suited for the German character are perhaps not quite the best for them; since they could not, if they would rival the Germans in their steadfast docility, and in their easy contentment with inexpensive kinds of food, clothing, house-room and amusements.

From "Municipal Ownership In Great Britain," by Professor Hugo R. Meyer, 1906, Chapter 6, p. 114:

In the days of Adam Smith, speakers and writers on questions of public policy, when confronted with perplexing problems, used to surmount the difficulty by saying, "It has been done in China." The public speakers and writers of to-day make a similar use of Germany, Australia, and New Zealand, countries concerning which the general public has acquired more misinformation than an energetic and well-informed man could correct in a lifetime.

From "Principles of Economics" (1911, Volume II, Book VII, Chapter 62, page 409), by F. W. Taussig, Professor of Political Economy at Harvard University:

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Government ownership of the telegraph prevailed in Continental Europe, because each country was more or less of a bureaucracy; that is, the civil service governed the country, and was so well organized that it extended itself as a matter of course. In America the civil service is not so well organized, does not govern the country, and is not allowed to extend itself as a matter of course. Political reasons decided the question in favor of a government telegraph in Europe. Political reasons form the main ground against a government telegraph in the United States.

From *The Nation* (New York), March 14, 1912:

We subscribe to no such dogma as the "impossibility" or "absurdity" of government ownership or management of public utilities. It is all a question of expediency—a question, to be sure, turning often on extremely broad and deep considerations, and not merely on the immediate facts of a given case, but still a question of expediency. It is fair to acknowledge, and to take for what it is worth, such an experience as that of Switzerland, especially as Switzerland is a democratic republic. But before we jump to conclusions regarding our own country, we must look certain large and vital facts in the face. Of these, the most obvious relates to the mere geography and history of the country. The United States is a vast new country, whose area—we speak of the contiguous territory, not counting Alaska, or the insular possessions—is 3,000,000 square miles; Switzerland is an ancient and fully settled country, with an area of 16,000 square miles. Texas alone could swallow up sixteen Switzerlands, and the population of Texas is barely more than that of Switzerland. It would take nine Switzerlands to make a Montana, but the people of Montana are only one-tenth as many as those of Switzerland. Evidently, the problem of reconciling the demands of the present, and of weighing the needs of the future, for this vast Continental area, filled with a restless, energetic and rapidly growing population and big with mighty changes almost from year to year, is not to be compared with that presented by the transportation problems of the compact and ancient little mountain republic of Europe.

From "Aspects of Public Ownership," by Sidney Brooks, published in the *North American Review*, August, 1911, pages 200-201:

* * * One of the most common and preposterous fallacies of our times is to suppose that there are any political dogmas which are universally true or any political prescription which can be applied indiscriminately or any political machinery which does not depend for nine-tenths of its value upon the engineers and the local conditions under which they work. * * * The type of mind which argues that because Glasgow has made a success in owning and operating the local service of street-cars, therefore Pittsburg or San Francisco would be equally successful and should at once follow in Glasgow's footsteps, is a type of mind that really ought not to be allowed to meddle with politics. It is fundamentally incapable of appreciating the fact that the forces which determine the success or failure of any and every political experiment are infinitely more local than general and more personal than mechanical.

New York Tribune, December 19, 1913:

It is to be borne in mind, too, that governmental service in some other countries is possible upon the theory exactly the reverse to ours. Their theory is that the Government should be comprehensively paternal and so should do as much as possible. The American principle is, everything should be left to private initiative, which the general welfare does not require to be done by the Government or which the Government cannot do very much better than private individual or corporation. The burden of proof of one of these latter conditions, therefore, rests with the advocates of the change.

Extract from an editorial in the *Seattle, Wash., Times*, September 23, 1913:

That the acquisition of the telegraphs would constitute a grave issue none can question. The question of governing the union employes of the present corporation, much as it is to the fore in present discussions of the subject, would be one of the smallest items.

There is no real comparison between the situation in European governments, where telegraphs are publicly administered, and those that would be developed in the United States.

In Europe, they are under national control as a war measure or because the governments need the financial returns accruing from their operation. Neither of these needs is present in the republic.

San Francisco, Cal., Post, October 13, 1913:

England, on the other hand, is thickly settled; there are no "dead lines" through unprofitable territory and the Government has not been required to make extension into isolated districts to be operated at a constant loss.

From "Public Finance" (1899, Part II, Chapter 10, Page 264), by W. M. Daniels, formerly of the Department of Political Economy, Princeton University, and recently appointed by President Wilson member of the Interstate Commerce Commission:

If we are to make use of analogy as a guide in such matters, the experiment which deserves our most careful study is the English experiment with the telegraphs. Here was a nation whose industrial habits were most nearly like our own. Here was an industry whose acquisition cost far less than the railroads, and whose administration was immensely simpler. Moreover, conservative financial opinion had pronounced in favor of the experiment. So careful a student as Jevons had concluded that state telegraphs would be successful largely for the same reasons which had made the state management of the post successful. It was found, however, that the economies secured by unity of management were offset by the higher salaries paid to employes, and that the government had to obtain a monopoly for the state telegraph, though formerly such an intention had been disclaimed. The financial failure of the experiment is hardly in question. A successful pressure of the telegraph personnel for higher pay, and an invincible demand by the public for lower rates, proved to be the upper and nether millstones between which the financial success of the undertaking was ground to powder.

New York *Times*, December 28, 1913:

Conceivably the service which might suit English customers would not serve the want of Americans, but the fact is that the British envy us what the Representative (Mr. Lewis) describes as unfit for our approval. It is sure that no American will envy England's telephone service as described in the leading British Journal.

According to the London *Times* "the history of the telephone in the United Kingdom has been of a lamentable tale of bureaucratic blundering tolerated by a community which has failed to conceive the potential method of communication, and to insist upon its effective organization on a business basis." The fact which shows British inappreciation is that the telephones per 100 population are 1.4% in England to 8.1% in the United States. London has 2.8% per 100 and New York has more than London, Berlin, Paris combined, although London alone has a larger population. The reason for the British backwardness, which Mr. Lewis wishes us to emulate, was the British ownership of the postal telegraph. * * *

In the opinion of those who have experience of the British system "the money value of the time and temper wasted by the public from a bad service is a far more serious consideration than any reasonable charges imposed for a good one, on the principle that speed and reliability are more important than cheapness."

Providence, R. I., *Journal*, January 1, 1914:

That the telephone is a vexation in England, is shown by the comparison of the telephone and the mail: 17.7 is the percentage of telephone messages and 80.5 is the percentage of the communication sent by mail. The preference for the mail in Great Britain thus is nearly 5 to 1. In the United States conditions are reversed: The mail takes less than 41 per cent. of the messages, while more than 58 per cent. is handled by the telephone companies.

Philadelphia, Pa., *Public Ledger*, December 22, 1913:

The London *Times* has had an expert review the situation for the benefit of its readers. His conclusion published a few days ago, ought to be interesting on this side of the ocean, also. He points out that the Government decided several years ago to take over all telephone lines and that the private company, which was operating under a terminable franchise, did not make the improvements in its plant that it would have made had it anticipated retaining control of its business. But he says, even if telephone progress had not been retarded by the impending Government control, "the rapid advance that is a vital commercial necessity to the country is not being made for the simple reason that a Government department is, to judge from experience, unable to carry on a great profit-making commercial concern on a sound business basis." During both periods, therefore, the period of private control and since the Government has taken over the private lines, he concludes that the telephones and the public "have suffered, and still are suffering from the influence of government control."

San Francisco, Cal., *Chronicle*, December 31, 1913:

In many countries with Government-owned 'phones, the system is a joke. Indeed, it is a mark of social distinction to have a "number." As for the telegraph, it is closed down for 24 hours every week in certain government ownership countries and it is impossible to send messages after 9 o'clock at night or before 8 o'clock in the morning.

Lowell, Mass., *Courier-Citizen*, December 24, 1913:

Meantime the telephone service of this country is the most efficient in the world. No foreign service that Mr. Lewis can find so much as approaches it either in extent or in excellence. Compared on the basis of the number of available exchanges to be talked with, the rate in the United States is infinitely lower per subscriber than it is in any other country on the foot-stool. The rate is constantly decreasing; the number of new telephones is steadily rising.

New York *Evening World*, December 22, 1913:

How many Americans have had actual experience of government ownership as it exists in other countries? How many Americans understand how foreign are most of its results to our habits of personal freedom and to our standards of efficiency?

In England the increasing burden of the government telegraphs upon taxpayers has been notorious. Germany makes its government telegraph system a handy instrument of espionage. France, although a republic, does much the same. Government in both these countries is essentially bureaucratic. Wherever even a degree of militarism prevails, government ownership is bound to lend itself to spying and repression.

Moreover, any American who has ever done any telephoning in France does not need to be told of the exasperating inefficiency and slowness of the French system. The same applies to Italy.

Switzerland hasn't found out yet whether it likes government ownership or not. The system was adopted on a theory of unification that may work in a country the size of Switzerland. Government ownership for less than four million people is a different thing from government ownership for one hundred million.

Japan took over its railroads, telephones and telegraph to provide war assets. The result has been in every way bad. The Japanese Government, forced by military burdens to economize, has found itself unable to make extensions. Not fifty miles of new road have been built since government ownership became a fact. It takes six months to get a telephone installed, and the less said about the service the better.

Americans who are used to enterprise, initiative, rapid improvement and wide extension in their public utilities, to say nothing of personal liberty and freedom from surveillance in their conduct and business, will find government ownership as it works in other countries a poor argument for foisting it upon Uncle Sam.

Utica, N. Y., *Herald-Dispatch*, December 20, 1913:

If Government control of wire systems could anywhere be made a success from a financial standpoint, it would be in Great Britain, where political influence is reduced to a minimum in the operation of public utilities. Yet the British Government has notoriously failed to make either the telegraph or telephone branch of the Post Office service self-sustaining. It is, therefore, reasonable to suppose that with the vastly greater temptation which the numerous wire systems of this country would offer to intriguing politicians, the ventures of government operation would be a disastrous failure.

New York *Evening Sun*, December 19, 1913:

But there can be little doubt that if a referendum were taken among the people who have had a chance to try Government-owned systems of Europe and the privately-owned systems of the United States, the Government ownership proposal in this country would be snowed under.

Boston, Mass., *Advertiser*, December 11, 1913:

Where Mr. Burleson could find such example is difficult to imagine. Surely not in England where the Christmas mail was recently threatened by a strike of Government employees. It was only the announced determination on the part of the British authority to call out the troops and use them in the interest of the Post Office, which prevented the strike from being called. Should Mr. Burleson turn to France for his illustration, he would have to explain away the terrible strike which tied up French railroads some years ago.

Had not the Premier called the military reserve and set them to the task of running the railroads, France would have nearly starved in a very short time.

Mr. Burleson ought to know that in Canada there are several Government-owned railroads which are in a plight to which the present condition of the B. & M. is as nothing.

Brooklyn, N. Y., *Eagle*, December 18, 1913:

Over his Government telegraph lines an Englishman may send a telegram for 6 pence, but at

the end of the year the taxpayers, as a whole, must make up the heavy deficit due to a combination of low rates with the expensive management which government operation of public utilities everywhere entails. Mr. Burleson is not fortunate in citing the British system as an argument in favor of his policy, and there is also a Government telephone service in Great Britain, and it is notoriously among the worst in the world.

Brooklyn, N. Y., *Times*, December 18, 1913:

But the main objection to the proposal arises from the fact that a distinct deterioration in service would be the inevitable result of the acquisition by the Government of these great public utilities. As President Vail of the Telephone Company well points out, there are more telephones in New York City than in the entire United Kingdom where the Government operates the system. In foreign countries the telephone is not a necessity. Indeed, it is in a sense a luxury. With us it is as necessary as the trolley car or the restaurant.

Chicago, Ill., *Manufacturers' News*, December 18, 1913:

Since England took over the telegraph lines, it has been confronted with an annual deficit of approximately \$6,000,000. This does not prevent the telegraph employees from asking for a 15% advance in wages.

The English ministry is opposed to further advance in the postal and telegraph employees' wages for reasons that their wages and pension allowance have been twice advanced during the last six years. The public also resents the demand made at the holiday season.

The present ministry is having an exceedingly hard fight to give the Government employees and working men, in general, everything they asked for, including old age pension, insurance and higher wages without running the country so badly into debt that it will never get out of it.

New Haven, Conn., *Register*, December 13, 1913:

Fortunately government ownership of telephones, either national, state or municipal has been tried out in a good many parts of the world. While it seems in some instances to be working fairly well, its failure has been so marked in many well observed cases as to lead to the suspicion that it really is a failure everywhere. For even the fact of a good service would not alone serve to commend it. We need to know that it promotes economy in the use of the peoples' money, and conscientious accounting for the great capital entrusted. This has not been the showing.

Lawrence, Kansas, *Gazette*, December 4, 1913:

Government ownership does not seem to help things along to any great extent. In England, where the Government owns the telegraph as well as the postal lines, there is a strike coming on that threatens to trouble the Kingdom grievously. The government employees want an advance in wages; the Government refuses to grant it; the employees have ordered a Christmas strike, and have begun the trouble by destroying records, smashing typewriters, short-circuiting the wires and playing other little jokes of the kind.

Erie, Pa., *Dispatch*, December 8, 1913:

That strike in Great Britain of the Government's postal and telegraph employees, 100,000 of them, was averted just in time. It would have been a particularly nasty time for such a strike. That, by the way, is one of the pleasant possibilities of Government ownership. The only difference would be that in this country the number would be so much greater and the chances proportionately so.

Chicago, Ill., *Inter-Ocean*, October 7, 1913:

It may be expedient to take over or destroy the present telephone and telegraph companies: The *Inter-Ocean* is among those who believe it is not expedient. In other countries "Government-ownership" has made lower efficiency and high costs.

Some years ago it was figured, nor was the accuracy of it denied, that British government ownership of the telegraph had loaded upon the taxpayers a loss of \$175,000,000, increasing at the rate of \$5,000,000 a year.

Boston, Mass., *Truth*, November 22, 1913:

Public ownership of railroads, telephone and telegraph would mean socialism; and if anyone wants to know what that means let him spend a few months in New Zealand, as Mr. Geo. W. Moore, of Brookline, Mass., recently did, getting first hand information in the Socialist hot-bed of the world.

"The country," said Mr. Moore, "is run by labor leaders for the benefit of labor leaders and is practically bankrupt. English capitalists have furnished the money to keep the Government going so far, but further loans have recently been refused.

* * * * *

"Practically the only right enjoyed by the alleged freeman is the right to be poor and abstain from work."

* * * * *

"Graft, inefficiency, laziness, indifference, poverty and vice seem to be the principal products of the system, and in the production of these it is all that can be desired of the vicious opponent of modern civilization."

Lawrence, Mass., *American*, November 14, 1913:

Mr. Samuel found, to be sure, as we all know it is true, that on this side of the Atlantic long distance calls do not always get through, that there are exasperating delays and that wrong numbers are sometimes given here as well as in England. But more important to know is his remark that in his official opinion the British Government telephone will some time become as efficient as he found the American private system. That means, of course, that if we make telephonic communication a government service, it is more likely to deteriorate than improve; for the British Post Office is so efficient that it would be folly to expect that American Government telephone would be as well administered as the British.

Leslie's Weekly, New York, November 6, 1913:

Governmental telegraph ownership is not an open question, however. Great Britain has enjoyed government ownership and operation of telegraph lines for the past forty years, and in that time its Post Office telegraph monopoly has produced a total deficiency of \$87,000,000. At present taxpayers of Great Britain are paying at the rate of \$4,200,000 annually to enjoy the luxury of governmentally operated telegraph lines. The principal reason for this is uncommercial and extravagant management due to political control.

New York *Commercial*, October 31, 1913:

The British taxpayer and telephone user is growing highly indignant over the delay in revision of telephone rates. He knows that the present telephone rates are a burden and a cause of confusion, and he evidently believes that the telephone business has been in the hands of the Post Office Department long enough to give its officials a chance to plan a permanent system and rate of charges for the use of the telephone.

The Liverpool *Daily Post*, a staunch government organ, has recently devoted considerable space to the scandalous break-down in the telephone service in that city and to the utter inefficiency of the postal authorities when handling this branch of their work. The telephone business is in its infancy in England and its growth has been completely stunted since the government got hold of it. With the post office in charge of the telephone service in Liverpool the suburban post offices in that city close very early in the evening and the telephone switchboard closes with the rest of the post office. The result is that telephone service is practically suspended through the residence districts and a large part of the business section of a city that is the third port in the world, and from eight o'clock in the evening until seven o'clock in the morning two-thirds of the subscribers to the telephone service find their communication completely cut off.

Boston, Mass., *Commercial Bulletin*, October 11, 1913:

According to the London *Times*, Parliament was induced to transfer the telegraph lines to the State in 1871, in the belief that the monopoly would be a lucrative one for the country. To what extent this expectation has been borne out is disclosed by the statement that the forty years of Government monopoly of the telegraph have produced a loss of more than \$87,000,000.

* * * * *

That the Government has not made a commercial success of the telegraph is due, says the *Times*, to extravagant management and political control. Traffic has shown a steady increase and innumerable improvements have been made in equipment and methods of working, yet it costs the Post Office appreciably more to handle a fifteen-word message of to-day than it cost to handle a thirty-word message of twenty-five years ago.

St. Paul, Minn., *Dispatch*, October 9, 1913:

England went into the experiment with the telegraph, found the estimate cost quadrupled, and after doubling the Government investment encountered an annual deficit of over \$5,000,000, and now coldly proposes to deteriorate the service and increase the rates to balance the books. With our rapidly increasing efficiency of service and cheapening of cost, what would America think of a proposal like that?

Minneapolis, Minn., *Tribune*, October 8, 1913:

France has one telephone for each group of 171 inhabitants. We have a telephone for each group of 12. Our service is so superior to that of the French that their journals are now calling for improvements in the direction of the "American standard."

England has had an extremely unhappy experience with her state-owned telegraph system. She paid four times the estimated cost to obtain it; and she has since doubled her capital expenditure. The investment has never earned interest; it has failed to pay operating expenses. The *New York Times* gives the commercial loss of the transaction at "\$175,000,000 some years ago," and states "that the current loss is \$5,000,000 annually."

Germany owns both telegraph and telephone. Her Government managers have estimated the annual depreciation of the plant at 45,000,000 marks. A sinking fund has been maintained several years at that rate. The maintenance has lately required so large an increase that this allotment has been reduced to 25,000,000 marks.

Seattle, Wash., *Times*, September 23, 1913:

In Europe they are under national control as a war measure because the Governments need the financial returns accruing from their operation. Neither of these things is present in the republic.

The experiments along these lines previously have not been distinguished by their success. The Government cable to Alaska is a case in point. Seattle residents have had a bitter experience with the high rates imposed on communication with the territory.

ARBITRARY AND IRRESPONSIBLE ADMINISTRATION

(Foreign—Official)

British Parliamentary Debates, Official Report, April 24, 1913, p. 632:

MR. ALAN SYKES: * * * With regard to the question of the telephone service * * * I may mention a case * * * which also happened to an hon. Member on this side, and the hon.

Member happens to be myself. My telephone, which is often out of order, was out of order on a certain occasion, and I sent a message to the officials. Nothing was done, and it was still out of order the next day. I sent another message the next day, but nothing was done. I did not send a message the next day, but I sent one the day after. Still nothing was done. I then took advantage of the fact of being a Member of the House of Commons, and addressed a personal letter to the Postmaster-General and put the position before him, and with his usual courtesy he took it up, and the question was inquired into. The reply he sent me was to the effect that no record had been made of the first complaint, that an operator had received the second complaint and had considered that the machine was all right, and had not reported it to the engineer, and that the engineer had examined the third complaint and could not find anything wrong, and it was only when I communicated with the right hon. Gentleman and the engineer made another examination that it was found that there was something omitted and that the telephone was not in proper order. If I had not had an opportunity of communicating with the right hon. Gentleman the telephone would in all probability still be out of order, and I should probably have done what a good many others do who use the telephone, got tired of making complaints and perhaps thrown up my telephone.

Truth, London, England, December 11, 1912:

His Honour Judge Gye made some very strong comments last week at the Portsmouth County Court upon the iniquity of telephone contracts. He had to determine a claim by the Postmaster-General for telephone rent. The subscriber had given notice of discontinuance. The Post Office authorities cut off communication, but left the instrument and then sued for the rent. This under the contract they are empowered to do. Judge Gye remarked that it was "a shockingly immoral contract," and he said so "advisedly and intentionally." He had no option but to decide for the plaintiff, for the case was governed by a decision in the High Court, though he was convinced that an injustice would be done the defendant. He, however, marked his opinion by making an order for payment of the amount claimed at the rate of 6d. a month. His Honour's condemnation of the contract is not a whit too strong, and I trust his remarks will be brought to Mr. Herbert Samuel's notice. Anyone who has read the contract through knows that it is inequitable, and places the subscriber absolutely at the mercy of the department.

British Parliamentary Debates, Official Report, May 20, 1912:

MR. GODFREY COLLINS: I desire to draw the attention of the Postmaster-General to three points on his estimate. The first is the misleading profit shown by the Post Office. The second is the large and growing loss on the telegraph service; and the third is the danger that the telephone service may show a loss to the public in future years. According to the House of Commons Paper No. 96, the profit on the Post Office is £5,153,000. Naturally, the House and the public think that is the true profit; but when we come to analyse these figures more closely, we find that the Post Office do not charge themselves with the cost of works and buildings, amounting to £569,000, nor with rates and taxes, amounting to £126,000, nor even with stationery and printing, amounting to £196,000. In other words, the profit is a fictitious profit to the extent of 20 per cent., and the figures which I have mentioned include these and other charges amounting to £890,000. So, therefore, the profit made was positively some 20 per cent. less than the statement issued by the Postmaster-General led us to anticipate.

From the Report of the Royal Commission Appointed to Investigate the Postal, Telegraph and Telephone Services of the Commonwealth of Australia (ordered to be printed October 5, 1910):

70. The Department furnishes annual statements showing only revenue receipts from its chief branches, and the total expenditure, including new works, for all branches of the service. Such statements are absolutely useless for the purpose of supplying the requisite information to determine the financial position of its several branches.

Annual
Statements
Useless

(Foreign—Editorial)

The Times, London, England, December 26, 1913:

"Hope Deferred" sends us the following details of his experiences in obtaining the telephone. Commenting on the state of "hopeless confusion" they indicate, he says:—"In our case it was stated that 'special steps' were being taken. The result of these 'special steps' was that we had to wait for the telephone 23 days after handing in the agreement. If such unwarrantable delays occur with 'special steps,' whatever must it be like without them?"

November 5, 1913.—Applied to Vauxhall Bridgeroad Post Office, asking what to do to obtain a telephone. They directed me to the Westminster District Post Office. They in turn directed me to the Contracts Office, 34, Gerrard-street, Soho, to whom I wrote on November 5.

November 11.—Having received no reply, I applied to a third post office and was given a third different address—namely, 144a, Queen Victoria-street. I went personally here and found what I needed—the telephone agreement, which I filled in and signed then, November 11.

November 14.—Wrote to the Controller, but received no reply.

November 17.—I wrote to the Secretary, G. P. O., complaining of the excessive delay and difficulty in getting the telephone. This resulted in a printed form by return of post saying that the matter should receive attention.

November 19.—Still dead silence from the Controller's office, so I wrote again reminding them that we were wanting the telephone and that they had had the agreement eight days, etc.

November 20.—No reply. Wrote again to the Controller.

November 21.—Received a letter from the Controller (dated 20th inst.) saying that the matter had been referred to the sectional engineer and that the matter would receive "prompt and adequate attention," etc. I spoke to the sectional engineer by telephone, and he knew nothing about us, but promised to send a man round to-morrow (22nd).

November 22.—Again spoke to the sectional engineer by telephone. He denied his promise of yesterday; said that they were busy, that they were making special efforts in our case, and that we should have to wait.

November 24.—Practically all my letters to the Controller are completely ignored; wrote to him once again to remind him about our telephone.

November 25.—Received a letter from the Controller dated 22nd, and altered in pencil to the 24th, acknowledging my letters of the 19th and 20th inst., and saying, *inter alia*, "special steps are being taken to complete the circuit at an early date." It is interesting to observe that it took two days to post this letter. Another letter about the entry in the Telephone Directory dated 22nd, and altered in pencil to the 25th, shows a period of three days between writing and posting.

November 27.—I received two different letters of the 26th inst. from the Controller giving our "probable" telephone number. One of these letters also states "the completion of the installation is receiving special attention."

On November 28 and 29 the instruments were put up in our offices, and it had been promised by the sectional engineer, by telephone, two or three times, that the installation should be completed by the 29th at the very latest without fail.

December 1.—I telephoned to the sectional engineer, and he said, "Oh, isn't your telephone completed yet?" He advised me to ring up the Controller's office, which brought forth the usual promises, but no result.

December 2.—Wrote a formal letter of complaint to the Secretary, G. P. O. Communicating with the sectional engineer by telephone, I was now informed that there was some more outside work to be done, but that we should have the telephone in a few days.

December 4.—The telephone was actually completed, and we were able to use it from about 4 p. m., 23 days after the handing in of the agreement.

Leicester, England, Mail, December 23, 1912:

In reference to the State acquisition of the telephones, with which we dealt in a leading article last week, a local correspondent calls our attention to the onerous and one-sided conditions which the

Postmaster-General has inserted in the form of contract which subscribers have now to sign. He objects particularly to the seventh and ninth paragraphs of the "general conditions" under which the Postmaster-General can break the contract without penalty or responsibility while, if the subscriber is guilty of the slightest lapse in any matter whatever, he is liable to a fine in the form of "liquidated damages" where no damage is done. Under the tenth paragraph enormous powers of inspection are given, not only to the subscribers' premises, but "all other premises under the subscribers' control," while another paragraph provides that the certificate of any subordinate official of the Post Office shall be "conclusive evidence" of the matters certified. Our correspondent wrote to the Postmaster-General pointing out clause by clause the objectionable points in this agreement, only to be told that it had been drawn up by a solicitor and could not be modified. "Those who think," adds our correspondent, "that the State ever can run a business at its best, speak without knowledge."

The Times, London, England, December 19, 1913:

Charles Straker and Sons (Limited), Bishopgate-avenue, who were sued in the City of London Court, yesterday, by the Postmaster-General, for 18s. 9d., balance due for telephone calls, complained that they had been charged for 30 times as many calls as they had had and said they defended the case in order to make a public protest.

Mr. Registrar Wild, in giving judgment for the Postmaster-General with costs, told the defendants that there was no remedy, no matter how much they were overcharged, as they had signed an agreement admitting that the Postmaster-General's books were unquestionable, however inaccurate they might be. The defendants must go to Parliament and get the agreements altered. They could not do without the telephone, and yet they could not get it without signing an agreement under which they had no voice in the question of the number of calls.

Troy, N. Y., *Record*, October 6, 1913:

Prince Charles Wreed, captain of a cavalry in the German army, has been fined \$7 because poor telephone service caused him to tell the girl operator that he considered her office a hog pen. The Prince's offense comes under the head known as beamtenbeleidigung. Being a Government employe, the girl could insist that her service should be respected. In extenuation of his act the officer said that the service was really almost worthless. While the prosecution acknowledged this condition, the fact that he had been discourteous could not be overlooked. Fortunately for many of our people, they are not using the telephone service which is under Government direction.

Rochester, N. Y., *Post-Express*, October 6, 1913:

Complaint against the wretched telephone system of one of the Government exchanges in a European city brought out the official threat that if the expression of dissatisfaction did not cease, the telephone service in the city would be discontinued for one year.

There is talk of the nationalization of American telephones and telegraphs.

The Daily Mail, London, England, September 16, 1912:

The Englishman's home is supposed to be his castle. Mas! it is nothing of the kind. Every person who signs a telephone contract opens his gate to the wooden horse, and from that moment the particular Briton becomes the veriest slave, helpless, without redress, and minus the most elementary rights, save the right to pay and overpay—in advance. The amazing thing is that the Briton does it, but he does.

The Daily Mail, London, England, February 6, 1912:

Most serious of all the complaints against the telephone service is the financial loss entailed by wrong calls.

Correspondents protest against their helplessness in the matter. They have no remedy in checking the calls debited against them. They must pay for whatever number of calls the authorities state is registered against them. Argument, the subscriber's own record of his calls are of no avail. If he does not pay the official reckoning, his telephonic connection is peremptorily severed.

(*American—Official*)

Congressional Record, January 15, 1914:

MR. CALDER: * * * An employe of a railroad or any other corporation or employer can bring suit in a civil court for damages for injuries received, and can recover an amount assessed by a jury. An employe of the Government is estopped from bringing any such action, no matter what the cause of his injuries may be, and he has no redress whatever.

From official statement issued by Postmaster-General Burleson, for publication in morning newspapers of May 30, 1913:

* * * Notwithstanding the great zeal displayed in the effort to place the Department on the so-called paying basis and the resultant injuries to the service, the claim of the former Postmaster-General that the service actually yielded a profit in 1911 has no foundation in fact. * * *

It is to be further noticed that the balance-sheet as heretofore prepared concerned itself entirely with the revenues from postage and the operations of the Department and expenditures under the appropriation for the service of the Post Office Department. In addition to this, the Department should be able to make a complete statement of its financial status, which should include the administrative expenses of the Department, the expenses of the Auditor's office, and a fair charge for the maintenance of Federal buildings used exclusively or in part for post-office purposes as items of cost. It has not been the custom to include these in the balance-sheet.

From the Message to Congress by President Taft, January 17, 1912:

Notwithstanding that voluminous reports are compiled annually and presented to the Congress, no satisfactory statement has ever been published of the financial transactions of the Government as a whole. Provision is made for due accountability for all moneys coming into the hands of officers of the Government, whether as collectors of revenue or disbursing agents, and for insuring that authorizations for expenditures as made by law shall not be exceeded. But no general system has ever been devised for reporting and presenting information regarding the character of the expenditures made, in such a way as to reveal the actual costs entailed in the operation of individual services and in the performance of particular undertakings; nor in such a way as to make possible the exercise of intelligent judgment regarding the discretion displayed in making expenditure and concerning the value of the results obtained when contrasted with the sacrifices required.

(*American—Editorial*)

New York Sun, December 22, 1913:

A wise and virtuous Congress has decreed that the post-offices over which Mr. Burleson presides shall sternly repress the habit of correspondence on Sundays, and every conceivable obstacle is courageously interposed between the man who wants a letter and the object of his desire. Would a Government telephone be conducted on the same high principles?

It is notorious that many frivolous conversations are carried on over the wires on the first day of the week. Moreover, these conversations are frequently for the promotion of plans that have not the approval of those who would restore the New England observance of the day to a country which has somewhat discarded it. Could a Government telephone system countenance such trivialities?

Certainly not: the exchanges would shut up on Saturday nights and open on Monday.

St. Louis, Mo., *Times*, December 22, 1913:

It is a perfectly simple proposition that those who seek to govern large public services should be amenable to the law. So long as individuals seek to perform these public services, there are always methods of redress when injustices have been done. If these methods are not practicable or if they are not applied, the fault is one that can be remedied.

But the government is greater than the law; and into its composition there go large numbers of men who are incompetent and others who are dishonest.

Chicago, Ill., *Inter-Ocean*, May 27, 1913:

In connection with the collapse of the recreation pier at Long Beach, Cal., on Saturday, by which thirty-six persons were killed and nearly twice as many seriously injured, there are circumstances which should give pause to some eager advocates of "public ownership" and of the "more government" proposition generally.

The pier belonged to and was erected by the city of Long Beach, which is a seaside suburb of Los Angeles. It was built eight years ago, and is stated in the Associated Press dispatches from the scene to have received since no repairs on the part which fell, directly in front of the "municipal auditorium" which was a part of the structure.

In a word, public ownership did not secure any better attention to the safety of the public using the pier than would have been given by the most "greedy and reckless" private ownership. In fact, it probably secured less attention, for had the pier been a private enterprise the responsible public officials would have had somebody else instead of just themselves to inspect and regulate and keep up to the mark, demanded by considerations of public safety.

Saturday Evening Post, December 14, 1912:

There is hardly a state, city or town in this country that makes an intelligible statement of its fiscal operations and condition.

Every state, city and town publishes once a year a thing it calls a treasurer's report or an auditor's report—usually a very bulky thing, containing an interminable maze of figures. We venture to say offhand that, as to about two-thirds of these reports, the best expert accountant in the United States could not construct from them such a concise and intelligible showing of income, outgo, indebtedness and cash on hand as the New York Stock Exchange requires from every corporation whose securities it lists. As to three-quarters of them, we venture to say that, if any such confused, occult statement were laid before the directors of a railroad, those directors would stand up in righteous indignation and discharge the whole accounting department on the instant.

New York Times, April 3, 1912:

There are those who are urging that we should administer the telegraph and telephone through the government, and who support the proposal by pointing to the success with which the Post Office is administered. This current year the Post Office reports a surplus * * *. But the Post Office surplus disappears if it is charged with the cost of the buildings in which it transacts its business. If it were to be charged with all other unitemized costs, it might appear that the stamp which costs 2 cents at the Post Office window really cost the buyer as much again. It is sure that the Post Office itself has no idea what it costs to carry a letter or newspaper either one mile or a thousand miles. In other words, the Post Office shows a profit by ignoring the burdens carried by all commercial undertakings and transacts its business in defiance of the first conditions of solvency in private affairs and contrary to the principles it enacts for the guidance of common carriers. To-day the franking privilege burden on the Government rivals the former pass burden on the railways. Depreciation is an unknown entry in Government accounts. Income is so far despised that it is proposed to operate the Panama Canal without tolls, although there are other than financial reasons to the contrary.

From "Principles of Economics" (1911, Vol. II., Bk. VII., Ch. 62), by F. W. Taussig, Professor of Political Economy at Harvard University:

* * * Every person who has looked into the accounts of a railway or iron works or large manufacturing concern knows how necessary it is to analyze the figures, and, above all the state of the capital account, before judging whether the management has been good. To supervise public officials, and to judge whether their administration has been efficient, becomes the more difficult as plant is larger and more complex. The more one is disposed to entertain general doubt as to the probable success of public officials, the more is one averse to intrusting such business to their hands.

COMPARATIVE EFFICIENCY

(Official)

Congressional Record, January 19, 1914, page 1973:

MR. McCUMBER: * * * No one will deny that we can not expect the same personal interest, the same curtailment of expenses, the same unfailing watchfulness when the Government has to pay the bills as when we must pay them ourselves. Government ownership of railways, telegraph lines, and other public utilities means bad service, extravagance, and a menace to the rights of all the people.

Extract from a paper by R. C. Erskine (Civil Service Commissioner, Seattle, Washington), read at the First Annual Conference of the League of Pacific Northwest Municipalities, October 24 and 25, 1912:

The other day I asked four large employers in Seattle which they would rather hire of two men of equal natural capacity and training, one having worked for a city and the other for a private employer for the five years since leaving school. Three of these employers said they would hire the man who had been with a private concern and the fourth said that while private employment was more apt to develop a good worker than public, it was the policy of his house not to hold a man's past business experience too much against him and he would give either of the applicants a chance to make good.

From "The U. S. Government's Shame" (1908), by Edwin C. Madden, Third Assistant Postmaster General from July 1st, 1899, to March 22nd, 1907, pp. 25-26:

The average time of Postmasters General is less than two years. They come in at the head of a service of which they know practically nothing and never stay long enough to learn. If all the Postmasters General for the past twenty years could be taken one at a time and questioned, it is doubtful if one of them would be able to tell offhand the rates of postage on mail matter, much less any of the vast details of the great system.

British Parliamentary Debates, Official Report, May 20, 1912, pp. 1599-1600:

SIR G. DOUGHTY: * * * I listened with very great interest to the right hon. Gentleman's statement respecting the telephone service. I know it is very bad, and it requires very great changes before it might be called decently comparable with either the United States or Canada. * * * In the United States they have over eight million telephones in constant use, and they can do it on the very best lines owing to their long experience and their method of working.

British Parliamentary Debates, Official Report, June 19, 1911, p. 86:

MR. MORTON: * * * I am sorry to hear to-day that the Americans are so far in advance of us in this matter of the telephone. We pride ourselves, I suppose, on being as much advanced as other people, but it is worth while bearing in mind, now we are told that the Americans are a long way in advance of us in their telephone service, that the service there is under a private company and that they are obliged to look after their customers better than a Government Department.

British Parliamentary Debates, Official Report, June 19, 1911, p. 52:

MR. HERBERT SAMUEL (Postmaster-General): * * * We have been closely watching the development of the telephone system in the United States—the country which was its original home, and where it has reached its highest development. For many years representatives of my Department have been visiting the United States in order to acquire information there. The head of the telephone branch of the Post Office has been to the United States, and the chief engineer has also made an exhaustive study of the telephone system there. The telephone traffic manager has only just returned. We have established a system of travelling scholarships for Post-Office engineers which will enable

them to go over to the United States for considerable periods in order to make a minute study of the telephone in that country.

From the Report of the Royal Commission appointed to Investigate the Postal, Telegraph and Telephone Services of the Commonwealth of Australia (ordered to be printed October 5, 1910):

Disregard of
ordinary business
methods.

103. * * * So far as construction materials are concerned, the Department has been working in a most primitive manner, exhibiting an utter disregard of ordinary business methods, and entailing a cumbersome and expensive system of purchase.

Defects in
management
and system.

9. Your Commissioners, during their inquiry into the management of the Post and Telegraph Department, discovered defects which were due to lack of efficient management as distinct from the system of control, and also defects which were inherent in the system. In framing this Report endeavors have been made to broadly separate the defects of system from those of management. It is evident that an inferior system, even under sound management, would make for an indifferent service. When, however, an inferior system is associated with a weak and limited management, the results are disastrous.

Report of Select Committee on Post Office Servants (ordered printed by House of Commons, July 24, 1907):

Salaries of Sorting Clerks and Telegraphists (In the Provinces).

Par. 254. Representations were * * * made (to the Committee) that the minimum established wage was * * * insufficient.

Par. 256. The department replied that in their opinion the rates of pay and the avenues of promotion were adequate. * * * "That the Government was obliged to tolerate, owing to Parliamentary pressure, a degree of inefficiency which in private employment would lead to dismissal of the employee."

(Editorial)

The *Daily Mail*, London, England, January 2, 1914:

Why is it that Government ownership and management of the telephones is practically always a failure? Why is it that for every thousand Europeans there is only one telephone, while for every thousand Americans there are fifteen? Why is it that the country which has done most to improve the telephone, both technically and commercially, and to popularise its use is the country in which its operation and development have been, and still are, exclusively the work of private enterprise? Why is it that not one of the innumerable discoveries that have transformed the telephone industry in the last thirty years has emanated from a Department of State, that European Governments have been the last to adopt them, and that the verdict which experts are obliged to pass upon them, with, perhaps, two partial exceptions, is that they have not learned their business? Why is it that there are great and famous towns in Europe at this moment where methods and machinery that were abandoned twenty years ago in America are still in use? Why is it that throughout the length and breadth of Great Britain and the Continent hardly a single efficient long distance service is to be found? Why is it that in New York one can invariably get the number one wants, and get it at once, while in London one has often to wage a prolonged and embittering battle with a slow operator, insufficient lines, and a conversation—if any conversation ensues—that is only audible when it is interrupted?

The broad answer to all these questions is that the alertness and enterprise that are essential to telephone development cannot be expected from a Government Department. The characteristics of the bureaucratic mind and temperament forbid it. The organization of a Government office, with a virtually irremovable staff, forbids it.

The Daily Mail, London, England, December 27, 1913:

Mr. Samuel has recently returned from a visit to the United States and Canada. The contrast between the telephone service he encountered there and the parody of it over which he presides at home must have filled him with mortification. Nor can he well have escaped realising that the essence of a telephone system, and the sole test by which its value can be judged, is its efficiency; that it is either efficient or it is nothing but an exasperating mockery; and that a cheap service which is also unreliable is far more expensive than a comparatively dear service that can always be depended upon.

The Times, London, England, December 3, 1913:

On the other hand, the fact remains that in America the exchanges, with practically the same equipment as is used in London, are able to give their subscribers a much more prompt and efficient service, as a matter of practical certainty. The shortcomings of operators in this country must not, therefore, be attributed entirely to the arduous and harassing nature of their work.

The root-fault appears to lie in the system, in the conduct of the telephone business by a Government Department instead of by private enterprise.

The Times, London, England, July 20, 1910:

In most European countries the need for rapid electrical communication is just as great as it is in America, and were the supply as efficiently organized as it is in America there would be almost as great a demand for the telephone service here as there. The fact that there is only one European telephone to ten American telephones must point to some general cause of slow or arrested development.

From the *National Telephone Journal*, London, England, reprinted in the *Financial Times*, London, England, February 22, 1910:

In America, on the one hand, the telephone service is rapidly being developed to its utmost limits; in Europe, on the other hand, State-controlled, the telephone system is either, at best, moderately developed, or else absolutely starved. There is no doubt that in a well-organized company the freer stimulus given to individual merit and capacity, and the reaction of the latter both on the quality and earning power of a service, benefits a far wider circle than the shareholders—namely, the public at large.

New York Press, February 15, 1910:

U. N. Bethell, vice-president of the New York Telephone Company, has received a letter from M. Millerand, Minister of Posts and Telegraphs in France, asking if the New York Company will take on six young telephone officials from Paris and give to them a thorough practical training in the telephone business in all its branches.

Bulletin des Abonnés au Téléphone (Telephone Subscribers' Bulletin), Paris, France, February, 1909, p. 3 (Translation):

In New York it takes 13 seconds and a half to obtain a local communication. In Paris, are we assured of obtaining a local connection at the expiration of 13 minutes?

Telephone Engineer, Chicago, Ill., December, 1913:

Former Postmaster-General James, a very high authority, has never favored Government ownership of the telephone and telegraph business. He has gone so far as to say that were the Post Office department managed with the same skill, energy and business capacity that characterizes the management of our great corporation, it would be practicable to reduce letter postage from 2 cents to 1 cent and still leave a balance in favor of the Government.

There is not a particle of doubt that a better mail service than we now have could be had under competent private management at a cost at least \$50,000,000 a year less than the people are now pay-

ing. Neither our Government nor any other, can manage the telephone and telegraph with half the economy and efficiency of private ownership and direction.

New York Press, December 27, 1913:

The Government will owe a billion dollars, say, but for all practical purposes of the Government it will be as if the deficit didn't exist. The Government will have to pay \$40,000,000 a year interest, say, but for all practical purposes of the Government it will be just as if it wasn't paying any interest at all. The Government will have to pay into the sinking fund several more millions a year, but for all practical purposes of the Government it will be just as if it weren't paying in a cent.

That is to say, this will all be so if the Government can and does operate the wire service as efficiently and as profitably as it is now operated. If it doesn't, of course, that will be a horse of a different color. And that is really the whole question.

Waterloo, Iowa, Reporter, December 23, 1913:

When the Government owns and operates the railroads, the telegraphs and telephones, rates will be much higher than they are now or else the Government will become bankrupt, as it cannot do any business as cheaply and efficiently as it would be done under private management, if interest on bonds necessary to acquire the properties is taken into consideration.

Philadelphia, Pa., Inquirer, December 22, 1913:

Telephone and telegraph companies are run on a scientific basis. Expenses are watched with great care. If anything goes wrong the remedy is promptly applied. Could the official red-tape of the Government be relied upon to reduce the efficiency of the private corporation? We seriously doubt it. England runs its telegraph through its Post Office Department, but financially it is a great loss. The deficit for forty years has averaged more than \$2,000,000 annually. The present deficit is more than \$3,000,000, and the recently acquired telephone service is another expensive experiment.

Albany, N. Y., Journal, December 20, 1913:

Again it is the question of efficiency of service. Would efficiency be maintained at the standard established by the private corporations? These have every incentive to give the best service possible. They need all the patronage they can obtain, since they are in business for private interests. The better they satisfy their patrons the more business they are likely to get. And they know that if they fail in any important particular, complaints can and will be made to agencies of the Government.

New York Sun, December 20, 1913:

The Telegraph and Telephone companies are among the best administered institutions in the world. Their systems are the result of long and sharp competition and the enlightened application of the best science and the most expert energy to the betterment of their systems. They are constantly meeting new demands of the business and they are voluntarily reducing rates wherever business permits.

The Postal service—but perhaps it is better merely to say that for years to come there will be work enough for the Government in improving the machinery in its present field of operation, without undertaking the preposterous and unnecessary extension of functions which Mr. Burleson's annual report so complacently proposes. This is the plain truth of the matter.

New York Press, December 20, 1913:

Whoever knew a Government building to be constructed as quickly, as cheaply and as successfully as a corporation or an individual constructs a similar building?

Whoever knew a Government service to be performed with the dispatch and efficiency a similar service is performed by a private enterprise?

Whoever knew Government employees to work the hours that other men work?

Whoever knew Government employees to put into their work, long hours or short hours, the steam that other men put into theirs?

Whoever knew the highest talent for organization, for administration, for business management, to seek Government jobs?

All this has a direct and vital bearing upon the proposal of men close to the administration to put the United States Government into the telephone and telegraph business.

Saginaw, Mich., *Courier-Herald*, December 19, 1913:

Government ownership works very well in countries which have a comparatively stable administration, in short there are no frequent changes of officials or reversals of policy. It is very questionable just how well it could be expected to work in a country like our own in which there is likely to be a complete change of administration and an entire overturn of Governmental theories and practices every four years. A business cannot be most successfully conducted which is likely to be placed in wholly different hands at short intervals, whose governing officials are likely to be appointed not for efficiency, but for political considerations, are likely to have had no experience with the department in which they are placed, and may fly off on entirely new and unexpected tangents.

Indianapolis, Ind., *News*, December 18, 1913:

We know, as a matter of fact, that Government management is always more costly than private management—and usually far less efficient. In England at the present time there is much complaint of bad telegraph service. Even our own postal service is far from what it ought to be.

The *Times*, London, England, December 1, 1913:

There is no doubt that the superiority of the American system has been attained in a great measure by administrative ability in its organizers and the wide field of opportunity, with few serious obstacles of competition, in which they have worked. Their outlook has been steadily national, not parochial. They have realized that defective telephonic communication is, in every sense, bad business, and that the factors constituting good service, in the order of their importance, are (1) speed and accuracy in securing connections; (2) volume and clearness of sound transmitted; and (3) cost. They have realized that the money value of the time and temper wasted by the public over a bad service is a far more serious consideration than any reasonable charges imposed for a good one, and they have therefore proceeded on the principle that speed and reliability are more important than cheapness.

Telephone Engineer, Chicago, Ill., November, 1913:

Thousands who are responsible for good telephone service to-day have studied it with intense concentration for thirty years. We would respectfully urge that all politicians who contemplate the advocacy of Government ownership devote at least an equal period of time to its investigation. By that time either the political efficiency of the country will be wonderfully changed or they will have decided that the thing cannot be done.

Boston, Mass., *Herald*, November 28, 1913:

Of all the agencies under heavens among men for conducting ordinary business, the Government of the United States is the least efficient. Its long range of operations—for Washington is a good ways off—its log-rolling by Districts and States, its necessary subordination to the demands of its organized employees, its redundant pay-rolls, all spell inefficiency. The general public pays the price, partly for the service at the time it is performed and later in general taxation. This is the way it is now paying for the Post Office and for the parcel post and for everything else.

Government ownership once secured, would mark the end of improvement in the transmission of intelligence by these two agencies. Do you realize how private enterprise would run the light-houses? By an automatic arrangement, just as the electric street signs are flashed on and off and without the need of individual attendance aside from supervisors. Will the Government ever do this? Never. Its aim is not to save labor, but to make it. Is Congressman Curley studying to find ways of

reducing the pay-rolls in the Charlestown Navy Yard? If he were would he remain Congressman long? * * *

The visitor to the National Capitol, taken into the Bureau of Engraving and Printing, will there be shown presses turned by human hands, with the suave explanation of the Government-paid attendant that the work is of such a delicate character that no form of mechanical power can be safely applied. This is sheerest humbug! There is not a shred of engineering testimony to that effect. If anything, the electric power of the present day is superior in uniformity and responsiveness to any that the human arm can supply. This is only one of the countless devices for making work, and openly advocated as such by the legislative agent who forced the requirement from a timid Congress.

Springfield, Mass., *New England Homestead*, October 18, 1913:

It took twenty years' persistent public effort to induce Congress to authorize parcel post. How awful it would be if, every time we wanted some improvement in railways, telephones or telegraphs, we had to wait for Congress to grant it.

New York *Times*, October 4, 1913:

It is interesting to note that it is always the prosperous private undertakings which the Government covets in the interest of the people. The Government never pioneers and develops and produces profit where none was before. The Government specialty is spending \$2 in the place of \$1, and hiring two men in the place of one. It is true that Government officials sometimes have delusions of grandeur in this respect, but the realization of the dreams are subject to such sad awakenings as overtook the British Government's dabbling with wireless communications.

The *Saturday Evening Post*, February 15, 1913:

The statement that Collector Loeb, of the port of New York, will resign promptly on March fourth is only one among many instances which remind us that business wants able men, but the Government does not.

We understand Mr. Loeb has made an exceptionally good record as collector of the port of New York. If he had made an exceptionally good record for the Steel Trust or a railroad or bank the employer would naturally be anxious to retain his services. To that end it would make him every reasonable assurance of permanent tenure, higher position and better pay—without inquiring to what political party or church he belonged. As an employee of the United States Government he might have made a record that astonished the world, but the employer would have no use for him after March fourth—no inducement of permanent tenure, higher position and better pay to offer him.

Brooklyn, N. Y., *Life*, February 8, 1913:

Professor Pupin of Columbia recently took exception to the casual remark of a gentleman who, being asked what he considered the three greatest institutions in the world, answered: the Roman Catholic Church, the German Army and the Standard Oil Company. Professor Pupin told him he was right only as to the last, for the three greatest institutions in the world were the Standard Oil Company, the General Electric Company and the American Telephone and Telegraph Company. Whether the professor was right or wrong these institutions testify to our organizing ability and if our government were run as they are, Germany would be taking lessons from us and one might talk of municipally operated subways without being popularly regarded as lacking in the upper story.

From an article entitled "The Government and the Railroads," by Arthur T. Hadley, LL.D., President of Yale University, published in *Youth's Companion*, April 18, 1912:

* * * An employee of the United States Government feels less assured of the permanence of his position than an employee of most of our private corporations. He is less certain that efficient service will result in promotion, and far more apprehensive of outside interference with his work by people who know nothing of the real conditions under which he labors.

SERVICE

(Foreign—Official)

Extract from Minutes of Proceedings of a Deputation from the London Chamber of Commerce, which waited upon Postmaster-General Samuel, July 4, 1913:

* * * Those of us who visit America are quite satisfied that the trunk (long distance) service in this country is not in anything like the shape of the trunk service in the United States. I do not think anyone who visited the United States would say that the trunk service here could be compared with the trunk service over there.

Letter from R. P. Houston, M. P., to Herbert Samuel, British Postmaster-General (*The Daily Mail*, London, England, June 13, 1913):

If the present chaotic and maddening telephone service you supply to the public is to continue I would suggest that the Government provide special lunatic asylums for those subscribers who will be driven mad by the use of what I believe to be the most inefficient and exasperating telephone service in the world.

British Parliamentary Debates, Official Report, April 24, 1913, pp. 621-622:

MR. LONG: * * * Since the telephone was taken over by the Post Office the actual service has in many cases not been so good, and complaints have enormously increased. I speak as one who has used the telephone himself at his own residences under the National Telephone Company and to-day under the Post Office. I have found nobody whose experience differs from my own, and I say that there were less complaints then than there are now, that I had less interruptions in the conversations which took place, and that the system worked better and more smoothly.

British Parliamentary Debates, Official Report, April 24, 1913, p. 594:

MR. GOLDMAN: * * * There is no comparison between the trunk (long distance) service here and that in the United States. In the United States the trunk service is known as a no-delay service, while in this country it is known as an all-delay service.

Statement by C. S. Goldman, M. P., in an article in *The Daily Graphic*, London, England, March 3, 1913:

Our telephones may truly be described as "the get-them-when-you-can service." This is not good enough. The post is regular. Deliveries can be relied upon to be made at a certain hour; even telegrams have some certainty in time; and when one person at one end of the wire wishes to speak to another person at the other end of that wire he should be able to do it quickly and well. The telephone in this country is a disappointment as a vehicle of efficient and reliable communication.

From Parliamentary Debates, Official Report, Great Britain, May 20, 1912:

MR. BAIRD: I wish to say a few words about the telephones in London. I think the transfer of the telephones to the Government has been a proof of the calamity of pushing upon the Government the control of a monopoly upon which the comfort of the public depends. After a considerable experience of telephones in a great many countries, I have no hesitation in saying that there is nothing, even in Abyssinia, half as bad as the telephone service in London to-day.

British Parliamentary Debates, Official Report, May 20, 1912, p. 1660:

SIR GILBERT PARKER: * * * that reform has not been carried out in the telephone system is evident to everybody who has suffered as I have from morning until night, having a good deal of business to do over the telephone wires. There has been nothing said to-day in criticism of the telephone system which is not abundantly justified, because if you go to the utmost corners of the world you will find a better system in existence than is to be found in this country, and particularly in London.

The Daily Mail, London, England, February 9, 1912:

Lord Devonport, chairman of the Port of London Authority, wrote in *The Times* yesterday as follows:

"As Parliament is not at present available, may I be allowed through the publicity of your columns to inquire of the Postmaster-General on what date he hopes to restore the telephone service to its normal state of efficiency and usefulness? At the moment, so far as the Port Authority is concerned, it has ceased to be a reliable aid to business."

From "La gestion par l'État et les municipalités" (State and Municipal Mismanagement), by Yves Guyot, Ex-Minister of Public Works, France, 1913, pages 349-50 (Translation):

In 1905, on returning from the United States, I found again, in Paris, all the charms of the telephone. I rang, but it was only at the end of one or two minutes that the operator answered. I heard calls, other numbers, conversations; and I waited until they were good enough to say, "They don't answer,"—referring to houses where employees are stationed at the telephone permanently,—or else the refrain, "Line is busy," which, of course, cannot be verified until later on.

I took a notion to complain. As a result, I had to do penance for a fortnight. No one could get connection with me, nor could I get connection with anyone else. I felt that I had earned a reward for my patience. The Administration, obsessed by this subscriber who complained so persistently, said to me at last:

"Come and see the Gutenberg exchange."

I went to see the Gutenberg exchange. I spoke of the United States, where, in New York, even in the busiest hours, all connections are made almost instantaneously.

"What do you expect?" said the official who accompanied me, and whom I met in New York. "Those are private companies!"

From Official Report, by Senator Emile Dupont, in the 1912 Budget, Post & Telegraphs, in French Senate Document No. 35, Appendix to Stenographic Report, Session of January 30, 1912, pages 74-75 (Free Translation):

COMPLAINT OF THE BOARD OF TRADE OF THE CITY OF VALENCIENNES.

* * * We are bound to state that, at present, it is useless to count on the telephone as a rapid means of communication between Paris and our city. The Postal Administration has known this fact for several years. At the end of the year 1908 it made arrangements for the construction of a third circuit between Paris and Valenciennes. The work of line construction commenced at the beginning of 1909. At the present moment it is not yet finished. Now each time that this subject is brought by our Chamber of Commerce to the attention of the Administration the answer is received that operations are continued without interruption, that they are pushed with vigor, but there is no result. Now what is the need of taking three years in order to construct a telephone circuit of 230 kilometres (143 miles)? Isn't this disconcerting?

Statement of Deputy Joseph Noulens, Reporter of the Committee of the French Chamber of Deputies on Posts and Telegraphs (as published in *Le Journal*, Paris, reprinted in the *National Telephone Journal*, London, England, September, 1908, p. 24):

The universal indignation aroused by the Paris telephone service is fully justified. Prolonged delays in answering calls, bad hearing and repeated interruption of conversation, are the ordinary features of the Paris telephone service, and are daily endured by the unhappy subscribers.

From the Report on the French Budget for Posts and Telegraphs for 1907, by Deputy Steeg, p. 67 (Translation):

The average time for connecting two subscribers in Paris is 1 minute and 50 seconds, if we are to believe the Administration. In America, the time that elapses between the subscriber's call and the moment when he obtains connection is, at most, 16 or 17 seconds. The difference is appreciable!

New York *Herald*, February 9, 1905:

M. Marcel Sembat, who is charged with the duty of reporting on the estimates for this branch of the public service, remarked that in other countries, notably in America, the telephone service is more satisfactory than in France. He added:

"In America particularly it has reached a degree of perfection that we dare not even hope for in France."

Proceedings in the Dresden, Germany, City Council (Translated from the *Dresdner Anzeiger*, July 5, 1913):

Resolved, that the council ask the executive board to present to the Imperial Postal Administration a petition for removal of the shortcomings in the Dresden telephone service, which are not alone to be explained by the change to the semi-automatic system.

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Councilman Kohlmann: * * * It makes no difference what the cause may be: the present condition is unbearable. If, as I have been told, the threat to shut down the telephone for months if the complaints do not stop, is true, even that might be better than having a telephone which can be used only occasionally.

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Councilman Kühn: Gentlemen! The opinion is unanimous that the present condition of the Dresden telephone service is unbearable and deserving of the severest criticism. It might seem that Herr Kohlmann had said enough, but I believe that the arbitrary way the Postal Administration has dealt with the complaints, in view of the scandalous conditions, should make it our duty to criticise very sharply.

Criticism of German Telephone Service by Herr Haberland, Deputy, on February 18, 1913, during a debate in the Reichstag:

The average time to get a connection (long distance) in Berlin is 1½ hours. Unless the call is classified as urgent, the connection takes several hours.

From an article by A. Bartolini, Royal Commissioner for the Reorganization of the Postal and Telegraph Service in Italy, published in *Rivista delle Comunicazioni* (official organ of the Italian Ministry of Posts and Telegraphs), October, 1913, pp. 848-9 (Translation):

The criticisms directed against the Postal and Telegraph Administration are numerous and varied. To realize their importance, one need only read the political and technical papers each day, and keep track of the proposals and suggestions made by the reporter for the Postal and Telegraph Budget each year.

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All this might be attributed, in large measure, to the easy and quick susceptibility of the Latin and particularly of the Italian temperament; but that is not so. There still ring in the ears of those who were members of the Commission which investigated the postal and telegraph offices throughout the Kingdom, the vehement invectives uttered by the Chambers of Commerce of Genoa, Turin, Milan, Venice, Naples, Palermo, etc., against the manner in which the postal, telegraph and telephone service is conducted in Italy. These bodies, giving direct expression to the needs of commerce and industry, said, in substance:

"If the State is incapable of conducting the postal and telegraph service as it should be conducted, let it be entrusted to us without more ado, and we will operate it directly, providing the necessary capital and adopting suitable administrative and accounting methods."

From a pamphlet printed in 1910 by the Italian Postal Telegraph Clerks' Association, Hon. Filippo Turati, Member of Parliament, Italy, President (Translation):

The (telegraph) service will continue on its road to ruin, and the country will endure the losses

and the jests. The Ministry of the Post and the Telegraph will then perhaps decide to send its telegraphic functionaries to Canada and Venezuela in order that they may learn there the great progress of the science.

Report by United States Minister Charles J. Vopicka, Bukharest, Roumania, printed in *Daily Consular & Trade Reports*, January 9, 1914:

The Director of Posts and Telephones has issued a statement to the effect that a direct wire is now open between the cities of Bukharest and Vienna. Until further notice only one city in this country will be able to have direct telephone communication with Vienna, Cernovitz, Lemberg, and Cracovia. The telephone rate for three minutes between Bukharest and Cernovitz will be 3.50 francs (68 cents); between Bukharest and Lemberg, 4.50 francs (87 cents); between Bukharest and Cracovia, 5.50 francs (\$1.06); between Bukharest and Vienna, 6.50 francs (\$1.25). In the event of a demand for the quickest possible connection, the regular rate is tripled.

(Foreign—Editorial)

The Daily Mail, London, England, December 27, 1913:

Since the Government took over the working of the lines and public interest in the efficiency of telephonic communication became proportionately vigilant, a catalogue of errors and misdemeanors has been compiled that would have driven any private company out of business.

Article by Charles Brunning, in the Liverpool, England, *Evening Express* (reprinted in the Boston, Mass., *Herald*, July 26, 1913:

Foreigners mistake the excellence and quickness of the American system for hustle. The American does things more easily than we do. In the first place he doesn't write so many letters—he simply telephones.

And here let me voice my admiration of that wonderful institution, the American telephone. "Wiretalking" in America is all done so quietly, so comfortably, so easily, so surely—either local or long distance—that one wonders how a civilized people like we are presumed to be can stand our ridiculous English telephone system. Truly we are a long suffering people.

Rarely does an American shout in his telephone. He speaks in a soft, easy voice, for all the world like a man saying his prayers in church.

Pall Mall Gazette, London, England, December 11, 1913:

In the closing days of that corporation the service was notoriously defective: an out-going tenant cannot be expected to show much zeal for improvements. But since the new management came in, bad has gone to worse, and dissatisfaction is more emphatic and general to-day than at any time since the invention was introduced to this country. Mr. Samuel asks further indulgence, but we are entitled to have a time-limit set to the invocation of the old familiar excuses and extenuations. The present state of matters is a handicap on every kind of national interest. All foreigners confess that until they tried to use our telephones they had never realized the self-abnegation and moral loftiness of the British character.

From a letter to the London, England, *Times*, December 9, 1913, by Sir Francis Trippel:

Sir:—In a large nursing home in Fitzroy-square, where 30 patients are lying more or less seriously ill, the telephone got out of order about 6 p. m. on Saturday. Every effort was made by the lady superintendent to have the matter put right, but the telephone officials said that nothing could be done on a Saturday night or Sunday. Repeated applications were unavailing, and the nursing home remained cut off from telephonic communication during Saturday night and all day and night yesterday. * * * It was not till after 40 hours' interrupted service that the telephone was in order again, and it required only a couple of screws to be fixed in the receiver—a few minutes' work.

Now, Sir, this disgraceful state of organization in the telephone service must cease to exist. When it may be a question of life or death at any moment, the public has a right to demand that

instant provision should be made for such an occurrence never to happen again between Saturday night and Monday morning, and, if left undone, the responsible authorities lay themselves open to a charge of criminal neglect.

Claridge's Hotel, Dec. 8.

Yours faithfully,

FRANCIS TRIPPEL.

Metropolitan Magazine, New York, August, 1913:

The telephone, for instance; if you want a nice test of temper, try to get a number at the Hotel Cecil in London; or, better still, spend a happy morning in ringing up people on the telephone in Paris. In America it is either done for you at once or you know it cannot be done, and the matter is settled.

The Standard, London, England, August 13, 1913:

As an instance of the delay and muddle of the State telephone system nothing has yet surpassed the treatment by the authorities of a Birmingham correspondent, who has vainly sought to be connected since November last. The Post Office actually suggested that he had better move to another house, so that his request could be the more easily complied with.

New York Times, August 10, 1913:

A subscriber writes to the (London) *Daily Mail*, telling this story:

Sir: I have found that numbers of friends who have tried to ring me up have always been informed that no reply could be obtained. On one or two occasions my bell rang, and when I put the receiver to my ear I could distinctly hear the operator saying "No reply" or "Engaged" to the person who was trying to ring me up.

I determined to test this, and, leaving my secretary one morning with the telephone in front of her, went out to a call office near. I asked for my own number, and, after waiting three minutes, was informed that the operator could get no reply. I asked her to try again, and, after waiting five minutes, was informed there was no reply. I then repeated the number and asked her to try once again, and in about half a moment the engaged signal began to go. I waited until this buzzing had ended, and then I said to the operator:

"I think it is only right to tell you that it is my own number I am trying to ring up from a call office just outside my flat, and my secretary is sitting waiting for this call."

I was put through immediately, and my secretary informed me that she had not moved away from the telephone, and no bell had rung.

Electrical Industries, London, England, December 4, 1912:

There is a certain amount of satisfaction in the fact that Mr. Winston Churchill got so angry over the freaks of the telephone the other day that he flung his receiver on the floor. As a member of the Government which purchased the telephone system, he deserves all the torture that Post Office working can inflict. But his rage, and the delicate remonstrance which he doubtless addressed to his right honorable colleague on the subject do not, unfortunately, make the organization any better for the average subscriber.

London, England, *Globe*, September 12, 1912:

Apparently, the Postmaster-General is of the opinion that a policy of masterly inactivity will eventually force the public, in sheer despair, to cease from grumbling, and give the telephone authorities some rest. If that is his belief, we can only say that he is mistaken. We English are a patient race, but we do not intend to put up with the worst telephone service in the world forever.

The Standard, London, England, January 2, 1914 (Letter from its Paris Correspondent):

I went to the Bourse Centrale soon after eleven the other night and found one employee busy in taking down applications for calls from a crowd of impatient journalists and men of business of all nationalities. From time to time he would shout out a name, "Popolo," "Secolo," "Tribuna," and a joyful Italian would spring forward and be allotted one of the nine cabins. His joy was premature,

apparently, however, for during the next few minutes a string of stentorian complaints echoed from within, "Nome di Dio! Rispondete! Dunque! Non mi intendete! Santissima Virgo!" Then would come a Berlin line open, and a repetition in German of "Donnerwetter! Scandál, Gotteswill!" etc.

Through all this the weary operator imperturbably sat on, impervious to objurgations and entreaties. There was a short circuit somewhere, and it was no use swearing at him. In pity I asked him how long he was expected to stand this work. "I come in at nine in the evening and stay till eight in the morning," was the reply. One wretched man for eleven hours to meet the whole interprovincial and international telephonic requirements of Paris!

Springfield, Mass., *Union*, September 23, 1913:

It is a sad commentary on the French telephone service that Aviator Gilbert on Sunday flew 100 miles from Paris to Reims in 55 minutes, and that he arrived at his destination before news of his departure could be telephoned.

Le Temps, Paris, France, August 31, 1913:

To-day our colleague, "L'Auto," protests against the difficulties which assail one when one wants to use the telegraph or telephone.

"A telegram which was handed in, in Deauville, the 28th of August at 9.15 p. m.," says our confrère, "was received in the office of 'L'Auto' the next morning, August 29, at 2 o'clock.

"A telegram which was handed in, in Leipzig, the 28th of August at 9.30 p. m., reached the office of 'L'Auto' the next morning, August 29, at 6 o'clock.

"As for the telephone, it is no better: Of the 15 cities constituting the relay points for the bicyclists' tour of France, we were able to get telephone communication with only five or six. The exchanges answered regularly: 'Such and such city * * * line out of order,' 'Such and such a city * * * line out of order!'"

"Those lines which we had taken the trouble to have reserved for June 12 for our interurban conversations, were not actually free until the latter half of July: the Tour of France, by that time, was two-thirds accomplished!"

Article by C. F. Bertelli, of Paris, in *Leslie's Weekly*, May 15, 1913:

What would the New Yorkers who grumble at a few seconds' wait do if they were at the mercies of the Administration des Postes Telegraphiques et Telephones, or "P. T. T.," as it is familiarly called? An authoritative series of tests carried out a short time ago showed that the Paris system is at least *seven and a half* times slower than the American! Whereas the average time required to get into communication in New York is, according to latest figures, eleven seconds (beaten by several other cities in New York State), the French capital is content to wait 1 minute, 20.8 seconds! The tests were perfectly fair, being made at the time of day when there is least rush. They were made from all parts of the city, and from all sorts of places—post offices, private apartments, hotels, business offices, cafes, etc., and the greatest possible variety of subscribers were rung up.

Letter from a French telephone subscriber to *Le Petit Phare de Nantes*, reprinted in the Bulletin de l'Association des Abonnés au Téléphone, Paris, France, September, 1912 (translation):

SIR:—In one of your recent issues of the *Phare*, mention was made of the protest of a subscriber, who, having asked for connection with Rennes, was informed that he must wait eleven hours in order to obtain it. This record seemed unbeatable, and justly so.

But to day I found I had to talk with Saint-Malo, and, wishing to be put through quickly, I had my name inscribed on the waiting list first thing in the morning: the operator told me—though very amiably, I must confess—that I would have to wait thirteen hours and ten minutes (you are reading it right) in order to be put through.

Zeitschrift für Schienenstromtechnik, Munich, Germany, September, 1913 (translation):

In an earlier issue we reported the stormy scenes which the disturbances in the Dresden telephone service occasioned in the Dresden council meetings. These disturbances have been manifest for

several months, beginning with the installation of the semi automatic system, and have made the telephone practically useless for a large number of the subscribers. This disorder has increased to such a degree, and has lasted so long, that many subscribers have decided to refuse to pay their telephone bills. This will probably give rise to more or less activity in the courts.

Article by Dr. R. Luther, Head Professor at the Dresden Technische Hochschule, in the Dresden, Germany, *Anzeiger*, June 28, 1913 (translation):

It is an irony of fate that the American engineers who came to study our "model technical works" should have visited us just at the time of this telephone anarchy. When they get home, these gentlemen can relate, with pitying superiority, that in the year 1913, thirty-six years after the discovery of the electro-magnetic telephone, in the age of the beginning of wireless telegraphy, one of the largest cities of Germany, Dresden, with over half a million inhabitants, is without adequate telephone facilities.

New York Times, May 5, 1913:

BERLIN, May 4.—Remarkable evidence as to the effect of the telephone upon the minds of people using it was given in a trial yesterday. Dr. Strauch, a commissioner in lunacy, said that even phlegmatic men might have their mental balance upset by exasperation at getting no reply from "Central." He mentioned the case of one of his own patients, a well-known doctor, who became completely insane through telephone exasperation.

Dr. Paechter, another witness, asserted that he could bring evidence to show that Government telephone girls had been permitted by the inspectors to utilize one of the big exchanges for the reception of their fiancés. One amusement of the girls of this exchange was to look up all subscribers having the same name, to connect all of them, ring them all up, and laugh loudly at the result.

New York Times, September 18, 1912:

BERLIN, Sept. 17.—Three engineering officials of the German Post Office Department are about to sail for the United States in order to investigate American telephone systems. * * * American telephones are regarded in Germany as the best in the world, and the hopes and prayers of business men and householders accompany the Post Office Department's Commissioners to America.

Mattino, Naples, Italy, November 6, 1910 (translation):

At a meeting of the Chamber of Commerce on November 4, 1910, the President, referring to the Royal Commission appointed to investigate the complaints of the telegraph, postal and telephone services, stated that he had brought to their attention the great delays in the delivery of telegrams and the execrable telephone service, and that he was obliged to say that, since the Government had taken over the telephone company, the service was far worse in every respect, and that he had taken steps to send a full report to the Commission.

From l'Italie, Rome, Italy, November 5, 1910 (translation):

Meetings have been held at the various chambers of commerce throughout Italy, but it seems that nothing is done to remedy the existing state of affairs, and every one is complaining of the utter impossibility of relying upon the telegraph service.

From l'Italie, Rome, Italy, November 5, 1910 (translation):

A telegram sent from Paris yesterday, at 2.37 p. m., was received in Rome at 8.20 p. m.
Six hours for transmission!

And this telegram was not given a messenger until 9 p. m.

Forty minutes for it to pass from the receiving room into the pocket of the messenger!

This message was very urgent, and asked that certain documents be sent off at once by mail. As the mail train starts for France at 8.40 p. m., it was, of course, impossible for the recipient, a reporter, to do as requested, and this delay caused serious inconvenience.

* * * * *

The Italian Telegraph administration takes undue advantage of the fact that the Government incurs no legal responsibility for the telegraph service!

From the *Die Zeit*, Vienna, Austria, reprinted in the *Elektrotechnische Zeitschrift*, Berlin, Germany, April 24, 1913 (translation):

For some time, it has been difficult to connect new telephones in the Vienna Exchange. The Postal Administration has several thousand unfilled applications, some of which have been put aside for years, and it cannot be expected that these applications will be filled for some time. This state of affairs exists in almost every part of Vienna; in some parts construction work has been entirely suspended, in others it is only carried on in a desultory manner. * * * The dissatisfaction among Vienna subscribers, and among those who might become subscribers, is very great.

New York *Press*, December 23, 1913:

When anybody on one side or the other of this debate talks rates and costs, they ought to be careful to make it clear what service is given the public, for the cost in each case and what the relative rate is. Mr. Lewis must know, for example, that when you hand in an ordinary telegraph message in virtually any Government office on the whole continent of Europe your message may go through in forty-eight hours; it may by accident go through in thirty-six hours; it may by a miracle go through in twenty-four hours; but if you want to get it through in a few hours you have to pay double and even triple rates.

The Government service in France, Germany, Italy, and Switzerland did not make any pretense of getting an ordinary telegraph message through—even short distances—within many, many hours of the time you can flash an ordinary message in this country from one side of the continent to the other and have an answer back on top of it.

RATES

(Foreign—Official)

From the Minutes of Proceedings of a Deputation from the London Chamber of Commerce which waited upon the Right Hon. Herbert Samuel, M. P., Postmaster-General of Great Britain, July 4, 1913:

MR. FAITHFULL BEGG: * * * There is one other very important point to which I am asked to refer and that is the question of the rates themselves. Now at the time of the transfer I think it may be fairly said that specific assurances were given or general assurances that the result of the taking over by the Post Office would not be anything in the nature of a general advance in rates, and I think the public, rightly or wrongly, concluded that as a matter of fact they would get their telephones for less. I never shared that view, but I think it was a more or less general view, and we are told—and I think there is evidence throughout the country—that there are very serious complaints of increases in rates. * * * Generally speaking, the Committee is of opinion that it can be shown that the changes which have taken place have in the main been in the direction of a considerable increase in rates.

British Parliament Debates, Official Report, April 24, 1913, page 594:

MR. GOLDMAN: The Postmaster-General himself has stated that he would give us service equal to that of the United States, if we were prepared to pay rates such as they are paying, say, between Liverpool and London, a rate of 5s. instead of the existing rate of 2s. 6d. The Postmaster-General should not forget that 2s. 6d. in this country is almost equivalent to 5s. in America. * * * I only want to point out to the Postmaster-General himself, who wanted to make out that he could give us an equivalent service if we were ready to pay 5s. instead of 2s. 6d., which we are

paying now, that, wages being three times as high in the United States and the money not going as far as in this country, we ought to get at least as good a service for 2s. 6d. as they get for 5s.

British Parliamentary Debates, Official Report, April 24, 1913, page 576:

MR. HERBERT SAMUEL: * * * The time is approaching for a revision of the telephone rates of charge. That is essential in view of the inequalities of charge between subscribers in the various districts.

British Parliamentary Debates, Official Report, April 24, 1913, p. 591:

MR. GOLDMAN: * * * The question which the Postmaster-General raised with regard to rates will only be received in this House and outside with modified satisfaction. He is only able to promise that he hopes in the future to be able to deal with the rates, which he ought to have dealt with at least two years ago.

* * * The Postmaster-General has acknowledged the urgency of dealing with these rates, because, in reply to a speech of my hon. Friend the Member for Devizes, he stated that the efficiency of the telephone service, and its development and extension, largely depended upon fixing the revision of the rates, and the delay in the development and improvement which a large number of subscribers are suffering from to-day owing to unfair rates, which he himself acknowledges, is largely due to delay on the part of the Post Office in dealing with the question of rates

British Parliamentary Debates, Official Report, May 20, 1912, p. 1566:

MR. HERBERT SAMUEL (Postmaster-General): * * * I am considering the introduction of a system of urgent telegrams at triple rates between this country and the Continent of Europe.

British Parliamentary Debates, Official Report, May 20, 1912, p. 1584:

MR. C. S. GOLDMAN: * * * Although the system may be more expensive in this country than in Germany, I do not believe that people mind spending more money if the system is satisfactory, but they object to paying these high rates for an unsatisfactory system, because no one can be satisfied when they have to wait half an hour or even an hour before they can get a connection.

British Parliamentary Debates, Official Report, May 20, 1912, p. 1586:

MR. C. S. GOLDMAN: * * * Perhaps the most controversial point in connection with telephones is that which refers to rates. This question has also been the subject of much discussion. The Postmaster-General will remember that only last year he received a big deputation from over one hundred municipalities in England urging him to deal with this question of the rates. * * *

Report on the French Budget for Posts & Telegraphs, 1911, by M. Charles Dumont, Deputy (translation):

Finally, telephone service in Paris is subjected to all the inconveniences of a flat rate:—a high subscription which deprives small and medium sized merchants from competing with more wealthy concerns—subscribers whose lines are occupied almost continuously (cafés, restaurants, etc.), and who, for the sum of 400 francs, cause the Administration a hundred times more work than an ordinary subscriber—the difficulty in putting through calls on the lines of these subscribers, which are almost always occupied, and, consequently, repeated losses of time for the operators—finally useless conversations, babbling and gossiping by telephone, which even the smallest message rate would discourage.

From the letter of the Belgian Minister of Railways, Post & Telegraphs, transmitting to the King a draft of the law providing for the abolition of flat rates, and the adoption of measured rates, published in *Le Moniteur Belge*, Brussels, September 16, 1911 (translation):

The system known as the flat rate system, at present in effect in our country, has gradually been abolished by foreign countries: it has been considered irrational and unjust, and as forming the greatest obstacle to the popularization of the telephone.

British Parliamentary Debates, Official Report, June 19, 1911, p. 85:

MR. MORTON: * * * There is a general feeling that the cost of using the telephone might be considerably reduced.

British Parliamentary Debates, Official Report, June 19, 1911, p. 54:

MR. HERBERT SAMUEL: * * * I am, however, now being pressed to promise immediate reductions in the existing telephone rates, and those who complain that the Post Office is not to be trusted to manage the telephones in a business-like way because it is too much open to pressure are often themselves the first to bring political and other pressure to bear in order to secure an immediate reduction to rates which might be to unremunerative amounts.

From the Report of the Royal Commission Appointed to Investigate the Postal, Telegraph and Telephone Services of the Commonwealth of Australia (ordered to be printed October 5, 1910):

Reductions
opposed by
Permanent Head
and Chief
Electrical Engineer.

32. * * * The evidence disclosed that the reductions in the telephone rates were made on the advice of a subordinate officer, and in opposition to the advice of the Permanent Head and Chief Electrical Engineer, and your Commissioners consider that the then Postmaster-General took action without having any sound reason for the drastic reduction made.

* * * * *

Confusion as to
rates.

187. This section of the Report will be confined to the telephone rates and charges imposed upon the public during the period of Federation. The evidence disclosed considerable confusion as to the basis of the charges to be adopted. Your Commissioners are of the opinion that the present charges are grossly inequitable to certain sections of the public.

* * * * *

Rates established
without full
consideration.

190. From the evidence, your Commissioners are forced to conclude that these rates were established without full consideration of the ultimate result, and a total disregard of the experience of other countries.

From the Report of the Royal Commission, appointed July 10, 1910, to investigate the telephone service in Italy (translation):

The present rates are not proportionate to the expenses caused by the various classes of subscribers, and, thus, those who reap the least profit suffer the most, and those to whom the service is of greater advantage pay the least.

Statement in the German Reichstag, April 16, 1910, by the Secretary of State for the Post Office, Published in the *Deutsche Verkehrszeitung*, Berlin, Germany, April 22, 1910 (translation):

* * * I am well aware that during the first deliberation of the proposed rate law various objections were raised by members of the House against the rate law. * * *

The renewed presentation of the rate law has led to many harsh criticisms in the dailies.

Report on the French Budget for Posts & Telegraphs, 1909, by M. Chautard, Deputy (translation):

The flat rate system, which is in effect in the larger cities of France, precludes a good service, whatever the excellence of the personnel and the equipment may be: this is to-day the unanimous opinion of engineers and telephone managers in every country, and it is an opinion definitely and scientifically established, because it is based on very wide telephone experience.

Elektrotechische Zeitschrift, Berlin, Germany, December 16, 1909 (translation):

A commission of the Hansa-Bund, brought together from all circles of German trades and industries for consideration of the proposed changes in the Telephone Rate Law, has unanimously voted the following resolution, which is to be sent to the legislative authorities:—

"The telephone ought to be a tool for daily use, yet in Germany, as opposed to other countries, especially Sweden, it has not obtained the popularity and usefulness due it, chiefly because its use heretofore has been much too costly for large circles of business, particularly for the middle-sized and small trades and industries, as well as for officers and householders.

"Consequently, we regard the proposed increase in cost of this indispensable and yet technically imperfect means of communication as a measure which must injure not only these wide circles of the people, but also the Government Postal Department itself. We are of the opinion that the surplus expected from this increase in rates would be obtained sooner by a reduction than by an increase, and that the urgent popularization of the telephone can be attained by a general cheap base rate and a measured conversation tax, which would be established not by individual count, but by blocks, and which could eventually be graded according to use."

Abstract from Debate in the Reichstag, Germany, March 3, 1909, published in *Archiv für Post & Telegraphie*, Berlin, April, 1909 (translation):

THE SECRETARY OF STATE FOR THE POST OFFICE: * * * It is well known to you that soon after the introduction of the Telephone Rate Order the desire arose to obtain a greater equalization.

* * *

The new rate order was arrived at as a result of experience and the demands of the House. They were carefully considered in conference with the South German Postal Government. After conclusions had been made, the chief commercial associations were asked to name a number of men whom they considered competent to advise the Government in this matter. The plan was submitted to these men for advice and suggestions, and a majority of them supported the new schedule. The objection all came from the smaller class which will suffer disadvantage from the new order; but they only amount to about 30 or 35 per cent., and the rest of the people are pleased with it. * * *

The objection is made that we pay the operators and general personnel too little; and that the hours are too long. But where is the money coming from, especially when there is a constant cry for reduced rates!

From the Report on the French Budget for Posts and Telegraphs for 1905, by M. Marcel Sembat, p. 61 (translation):

Moreover the high subscription rate, 400 francs, prevents a great number of little shop keepers and little business men from having the telephone.

(Foreign—Editorial)

Liverpool, England, *Daily Post and Mercury*, October 29, 1913:

Mr. Ogilvie's speech to the Advisory Committee affords rather cold comfort to those of us who have been hoping that under Government control telephone rates would be materially reduced. We seem to remember that another distinguished official expert more than once declared that the ambition of the Department was to lay on the telephone like gas and water into every house, and that this could not be done unless the existing charges were brought down by a large amount. Instead of this, we have the Secretary to the Post Office, one of the most progressive and enterprising officials in the service, telling us that he does not anticipate any immediate increase of rates, but that "it will be almost impossible to have a permanent rate for telephone service, and rates will have to be reviewed from time to time." Furthermore: "The authorities are not very sanguine that much of a reduction in the rates will be possible." This certainly is not what the public expected when the Government took over the service. It was felt that charges which enabled the old company to pay a good dividend, and a

very big royalty to the State, ought to be capable of reduction under Government administration when those items were abolished.

From an article entitled "Public Ownership in France," by Paul Leroy-Beaulieu, in the *North American Review*, March, 1913.

It is not superfluous to say here a few words about one of the more recent French State monopolies—the telephone. The complaints under this head are universal. In the first place, the tariff is very high—400 francs, or nearly \$86 a year in Paris, the aim of the State being to get out of it as much as possible—40,000,000 francs gross.

Winnipeg, Manitoba, *Tribune*, December 29, 1911:

The *Tribune* learned this afternoon that strong and probably effective pressure of a party political nature is being brought to bear on the Local Government to suspend the proposed new telephone schedule, and substitute one that will be within a measure of reason. * * * At any rate, the *Tribune* is assured that the new rates will not prevail, for the simple reason that the public will not stand for them. * * *

Winnipeg, Manitoba, *Free Press*, December 28, 1911:

At the annual meeting of the Winnipeg Builders' Exchange last night the following resolution was passed unanimously:

"Resolved, that the Winnipeg Builders' Exchange, at this annual meeting, do hereby emphatically protest against the proposed increase in the schedule of telephone rates in this city, believing the same to be excessive and unjust, and further affirms that in its opinion no increase in the rates should be proposed until a full statement in detail of the cost of the system, and of operating the same, has been placed before the people, who are the owners of the property, and that such statement should show the cost and the expense of operating that portion within the city of Winnipeg, and the revenue derived therefrom."

Winnipeg, Manitoba, *Free Press*, December 22, 1911:

The medical men say they are out to beat the proposals of the government in the matter of telephone rates. One of their number states that a meeting of the practitioners in the city will be held at an early date, and the whole matter brought up for consideration and action.

Winnipeg, Manitoba, *Free Press*, December 20, 1911:

The storm of protest against the Manitoba Government telephone new rates is now taking more material form, and the various bodies of business men who are organized in the city are taking the matter up in public, and moving in the direction of having the rates repealed.

* * * * *

At the same time the protests continue from every quarter of the city and the province. Every shade of political opinion and every class of society is represented by the subscribers, who feel that the new rates are an injustice to those who have patronized the telephone system for so long.

Winnipeg, Manitoba, *Free Press*, December 14, 1911:

Many have said that under the new schedule they will have to do without the 'phone. Others have suggested a boycott. One prominent man of business says that the subscribers in the city should band together and abolish the 'phone, thus meeting the authorities on their own ground. They have not been consulted regarding the change, and it is simply outrageous. Another says, "The post-card is cheaper and will serve my purpose as well."

And not only is the denunciation of the rates confined to the small householders or the small business men of the city. The leading men of the city are out against the proposed rates. The Board of Trade will take the matter up at its next meeting. It will be considered by the Builders' Exchange, and a committee of the Industrial Bureau has been appointed to take the matter up. It is not, therefore, the cry of one single class or section of the community that is heard, but the universal voice of the community.

Winnipeg, Manitoba, *Free Press*, December 14, 1911:

Yesterday the Manitoba Telephone Commission issued a statement of the new telephone rates.

* * * The new schedule which is announced makes a number of changes which are of importance and the cost of the telephone in the house and the office will be materially increased.

A number of business men in the city who had gone into the rates as announced are strong in the condemnation of them, and say that many of their customers will as a result of the changes dispense with the telephone, and as a consequence business will suffer greatly. A storm of protest has come from private telephone users all over the city.

Zeitschrift für Schwachstromtechnik, Munich, Germany, October, 1911, No. 20:

The Guild of Trade Agents in Prague has begun energetic agitation against the increases in the telephone rates which are to take effect in Prague on January 1st of next year. A petition, with reasons fully explained, will be presented shortly by this Guild to the Minister of Commerce at Vienna.

Blätter für Post und Telegraphie, Berlin, Germany, October 15, 1911 (translation):

The new Telephone Rate Law, which according to the plan of the Government was to have gone into effect on April 1, 1911, is at the present moment still being discussed in committee—a proof of what vast importance the proposal must be for almost everyone, and an evidence of the widely varied convictions of the different parties in the Reichstag. The proposed law received—almost without exception—an unfavorable reception in the daily press; however, it must be noted that only the sentiments of those received expression who—rightly or wrongly—thought their own rates would be increased, so that the public press cannot be considered as the true reflection of public opinion.

Elektrotechnische Zeitschrift, Berlin, Germany, February 9, 1911 (translation):

During the first meeting of the Executive Committee of the Berlin Trade and Industrial Association, January, 1911, the new telephone rates were discussed, and after deliberation the members voted to oppose the Government's proposition. According to the views of the Committee, these rates do not meet the wants of commerce and industry.

Statement by Leon Gerard before the Chamber of Commerce, Brussels, Belgium, published in the *Bulletin of the Chamber*, January 15, 1911 (translation):

We have learned that the government has planned to modify telephone subscription rates. The plan which it proposes to adopt has caused great protest, and we have thought it necessary to call at once a meeting of the Executive Committee, in order to deliberate without delay upon this question.

* * *

For several years, Belgium's trade and commerce have raised complaints both about the organization of the telephone service and about the height of the telephone rates. These complaints, set aside for a long time by every possible dilatory means, have finally succeeded in causing the administration to elaborate a new tariff schedule.

The first glance at this tariff schedule has been sufficient, because of the rate increases which it necessitates, to cause outcries of public opinion.

Elektrotechnische Zeitschrift, Berlin, Germany, January 5, 1911 (translation):

With regard to the attacks which the new rate schedule of the Administration has occasioned in trade circles, the matter has been submitted to expert opinion by the Board of Trade in addition to the Chamber of Commerce of Vienna. At the recent meeting representatives of the Government were also present. The management of the entire telephone system was discussed, and it was urged that operation be carried on on a more commercial basis than formerly. * * *

* * * The meeting reached the decision that the Department of Commerce be requested to remodel the rate schedule and in doing so to have regard to the points recommended by the Board of Trade.

The Frankfurter Zeitung, Frankfort, Germany, June 2, 1909 (translation):

At the end of 1907 a committee of representatives of the three German Postal Administrations met and agreed on a bill for the new regulation of the German telephone rates—apparently on the proposal of the Bavarian Government. This bill, in January, 1908, was placed before a committee of the different circles interested, called together by the German Post Office, and, after lengthy consideration, was practically declared to be acceptable. But when the bill with the supplementary memorandum was made public, general opposition arose and fifteen months of most vigorous discussion followed. On the 10th of February, 1909, the bill and memorandum were placed unaltered before the German Reichstag, and at the present time the bill is resting in Committee.

* * * * *

It will be seen that the injustices of the proposed tariff are quite of the magnitude of those of the existing tariff.

(NOTE.—Agitation for a revision of rates began in 1906. The Government immediately recognized the need for a general rate revision, and has since then been planning the revision. Latest advices show that no action has as yet been secured during the eight years of rate planning.)

(American—Editorial)

From "Alaska—An Empire in the Making" (1913, Chapter XVI, pages 205-7), by John J. Underwood. (The information contained in this book was gathered during an almost continuous residence of fourteen years in Alaska and the Yukon Territory):

There is at present one good example of government ownership in Alaska in the telegraph system of the Territory, which is owned and operated exclusively by the government under the direction of the Department of War. The tolls charged on this system are such as would force a private corporation to keep a hydrant playing on its stock books to keep down the dividends to a point where they would not create a public scandal.

* * * * *

Mile for mile the government charges at least 280 per cent. more for service in Alaska than does either of the large companies operating in the United States.

The rate charged for a message of ten words from Seattle to Nome, a distance of 2,340 miles by steamship course and 2,879 miles by the telegraph and cable route, is \$3.80 and thirty-eight cents for each extra word. The rate charged by either of the commercial companies for a ten-word day message from Seattle to New York, a distance of 3,000 miles, is \$1.00, and seven cents for each additional word. The rate for telegraph and cable messages from Seattle to London or Berlin, a distance more than twice as great as that from Seattle to Nome, is \$2.90. Messages between points in the United States are transmitted on about an equal mileage basis.

New York Press, December 22, 1913:

To find the exact relationship between British and American charges for telephone service will require scientific investigation into all those conditions, with technical adjustments to make true comparisons and expert measurements of what really comes out as service for what really goes in as cost. Meanwhile, we do know positively that, whatever the actual cost comparison, we have something over here worth, in what it does for us, a very great deal more than the British service is worth.

As for the French telephone service, it is both poor and dear. It is so wretchedly poor that nobody in Paris, for example, will have a telephone in the house if he can possibly do without it. It is both so low in efficiency and high in cost—for what is done—that Paris doesn't make the relative telephone showing of an ordinary American village. Technical measurements of those facts also must be forthcoming before any final judgment of the true balance will be reached.

EXPENSE

(Foreign—Official)

From the Report of the British Postmaster-General for the year 1912-13, p. 34. No allowance has been made for: (a) Interest on capital invested since September 30, 1873; (b) Depreciation; (c) Interest on accumulated deficits. "No rent is charged in respect of premises owned by the Postmaster-General and used for the purposes of Telegraph business."—*Official Report*.

TELEGRAPHS.—The telegraph revenue of the year, including the value of services rendered to other Departments, was £3,167,410, an increase of £19,705; and the telegraph expenditure, including the interest on the capital—£10,867,644—expended on the purchase of the telegraphs, was £4,124,976, a decrease of £309,897 upon the previous year. The net deficit was thus £957,566, or £329,602 less than last year.

Financial results of the combined telegraph and telephone toll service in New Zealand, for the year ended March 31, 1913, as published in the Official Report of the Post and Telegraph Department:

	£	\$
Gross Telegraph and Telephone Toll Revenue (including Miscellaneous Revenue)	321,951	1,564,682
Value of Government Messages	4,931	23,965
Total Value of Telegraph and Telephone Toll Business.	326,882	1,588,647
Total Telegraph and Telephone Toll Expenditure (excluding interest charges)	388,464	1,887,935
Official Net Profit (excluding interest charges) of the Combined Telegraph and Telephone Toll Services	—61,582	—299,288

From telegraph statistics for Spain, for 1911, published in *Le Journal Télégraphique*, Berne, Switzerland (official organ of the International Bureau of the Telegraph Union), May 25, 1913 (translation):

Total receipts	Fr. 10,622,159	(\$2,124,432)
" expenses.	Fr. 12,153,718	(\$2,430,743)
Deficit.	Fr. 1,531,559	(\$ 306,311)

From telegraph statistics for the Union of South Africa, for 1911, published in *Le Journal Télégraphique*, Berne, Switzerland (official organ of the International Bureau of the Telegraph Union), May 25, 1913. (Telegraphs in the Union of South Africa are State owned):

Total receipts	Fr. 8,271,900	(\$1,654,380)
" expenses.	Fr. 9,530,588	(\$1,906,118)
Deficit.	Fr. 1,258,688	(\$ 251,738)

From the Official Report of the Minister of Public Instruction, Post and Telegraphs, Ecuador, for the year 1911-1912, p. 26 (translation):

To be perfectly candid, I can do no less than state in this report that the accounting of the telegraph branch still suffers from "routine-ism" and really woeful inefficiency. And without proper accounting, it is difficult to exercise any control, or to make just criticism. The result is, that in a service whose income should suffice to meet its needs and to yield an assured profit to the exchequer, there occurs, year after year, a greater and greater deficit, as can be proved by simply making a comparative analysis of figures and dates.

Limiting myself to the year with which this report is concerned, the financial standing of the telegraphs for the last six months of 1911 was, approximately, as follows:

Receipts	Sl. 169,586.62	(\$ 82,588.68)
Expenditures	Sl. 230,486.17	(\$112,246.76)
Deficit	Sl. 60,899.55	(\$ 29,658.08)
In the first six months of this year the revenue and expenditures were as follows:		
Receipts	Sl. 139,804.63	(\$ 68,084.85)
Expenditures	Sl. 221,650.28	(\$107,943.68)
Deficit	Sl. 81,845.65	(\$ 39,858.83)

Financial results of the combined telegraph and telephone toll service in New Zealand, 1907-08 to 1911-12, inclusive, as published in the Official Reports of the Post and Telegraph Department:

Year ended March 31.	Gross Telegraph and Telephone Toll Revenue (incl. Miscellaneous Revenue.)	Value of Government Messages.	Total Value of Telegraph and Telephone Toll Business.	Total Telegraph and Telephone Toll Expenditure, including charges.	Official Net Profit (excluding interest charges) of the Combined Telegraph and Telephone Toll Services.	
	£	£	£	£	£	\$
1908....	227,398	4,499	231,897	275,757	—43,860	—213,160
1909....	238,104	4,821	242,925	307,166	—64,241	—312,211
1910....	250,212	4,851	255,063	322,485	—67,422	—327,671
1911....	272,943	4,874	277,817	344,046	—66,229	—321,873
1912....	295,334	4,832	300,166	364,613	—64,447	—313,212
Totals	1,283,991	23,877	1,307,868	1,614,067	—306,199	—1,488,127

Statement of Herr Reinhold Kraetke (Postmaster-General of the German Imperial Postal Service, including the Telegraph and Telephone services) made in the course of a debate in the Reichstag on March 27, 1912 (published in the *Deutsche Verkehrszeitung*, April 5, 1912):

The gentlemen know that the Telegraph Administration is run at a very heavy loss.

From the Report on the French Budget for Posts and Telegraphs, 1911, by M. Emile Dupont, Senator, Senate Document No. 189, p. 117 (translation):

The consequence is that, taking everything into account, the operation of the telegraphs results in a deficit. * * * In his Supplementary Report on the Budget for Posts and Telegraphs for 1905, Hon. M. Sembat tried to draw up a balance sheet for the three great branches of the service. With definite reservations, he indicates a deficit of 9,777,000 fr. (\$1,886,961) for the telegraphs.

From the Official Report of the Postmaster-General of the Union of South Africa (Department of Posts and Telegraphs), for the year 1911 (p. 12):

After debiting the telegraph account with all direct charges incurred and a proportionate share of the cost of administration and other general expenditure, and, on the credit side, including the value of work undertaken free of charge for other Government Departments and of the concession represented by the reduced rates to the Railway, it is found that the working of the Telegraphs of the Union resulted in a deficit for the year of over £60,000.

From the Report of the Postmaster-General of the Union of South Africa, for the year 1910:

Although every effort has been made to reduce expenditure, there is little prospect of the Telegraph Department paying its way. The Reports of all the Provinces prior to Union showed losses in working, the amount in the Cape Colony and Transvaal being at the rate of £37,000 and £34,052 per annum respectively.

* * * * *

The general position of the Telephone Account of the Union for the calendar year 1910, was:

Capital Expenditure	£893,239
Revenue, 1910	167,271
Expenditure, 1910, including interest and depreciation.....	189,049
Deficit	21,778

From the Annual Report on the Postal, Telegraph and Telephone Service of The Netherlands for the year 1910:

Total Telegraph Revenue.....	Fl. 2,543,679 (\$1,017,472)
Total Telegraph Expenditure.....	Fl. 4,180,227 (\$1,672,091)

Deficit Fl. 1,636,548 (\$ 654,619)

From the Report of the Royal Commission Appointed to Investigate the Postal, Telegraph and Telephone Services of the Commonwealth of Australia (ordered to be printed October 5, 1910):

Accepting the most liberal reading * * * the estimated loss on the transactions of the Department from the inception of the Commonwealth to 30th June, 1909, amounted to at least £2,300,000.

* * * * *

The information furnished would make it appear certain that the postal section of the Department returns a profit as a whole but the extent of such profit was not ascertainable. * * *

Your Commissioners therefore conclude that the Department's unsound financial position is due to the fact that telegraphic and telephonic services are rendered at rates which do not return revenue sufficient to cover all charges against capital account, and working expenses.

From report of a speech of Representative Dr. Paasche in the German Reichstag, February 15, 1901, as given in the *Archiv für Post und Telegraphie* (an official publication), for April, 1901 (translation):

In accordance with information furnished by the Secretary of State of the Imperial Post Office, an attempt has been made to estimate the financial result of some branches of the Postal Administration, by applying ordinary commercial principles. Using correct rates for depreciation, and a proper interest upon the capital invested in the telegraph, it appears that this service requires annually a contribution of 15,000,000 marks, being, therefore, a losing business.

From a speech delivered at Tourcoing, France, November 17, 1913, by the Marquis de Montebello, President of the Association of Telephone Subscribers, printed in the *Bulletin des Abonnés au Téléphone* (Bulletin of the Telephone Subscribers' Association), Paris, France, December, 1913 (translation):

The State in France has not even a proper accounting system for the telephone. It does not know whether the telephone yields a profit or whether there is a loss. A senator has calculated that the State probably loses about eight millions each year.

(Foreign—Editorial)

Telegraph and Telephone Age, New York, February 16, 1912, page 121, quoting from the *London Spectator*, in regard to the British telegraph service:

When all these facts are taken into account—namely, the original capital which has never been repaid, the advances from Parliament upon which no interest is charged, and the annual deficiencies on working expenses—it will be found that the aggregate commercial loss to the country by the state purchase of the telegraphs is not less than \$175,000,000. Nor can we console ourselves with the reflection that for this \$175,000,000 the state has a valuable asset, for that asset, such as it is, involves every year on its working an additional loss of over \$5,000,000. From a commercial point of view the purchase has been an unmitigated failure.

Boston, Mass., *Transcript*, December 22, 1913:

It is to be hoped that such gayety will not become contagious, for if it does there is no saying how soon we shall be imitating the example of Australia, which in its zeal for public ownership has accumulated a bonded debt fully fifty per cent greater than the United States. This may seem a startling statement to make with regard to a commonwealth which has less than 5,000,000 inhabitants, but figures bear it out. The total public debt of the States composing the Commonwealth of Australia was: June 30, 1912, about \$3,365,000,000, or, deducting the sinking fund, \$1,335,000,000. This was accumulated through government ownership, and represents bond issues for the State railroads and State proprietorship of public utilities generally. The railroads, all of which are State owned, cost for construction and equipment \$766,000,000, though they have a mileage of but 16,078 in operation. Their gross receipts are about \$89,000,000 a year, their operating expenses about \$56,000,000. Inasmuch as the population of the United States is about twenty times that of Australia and our railroads have 250,000 mileage, it will not require a very elaborate calculation to reach what would be the cost if we should imitate Australia.

Providence, R. I., *Journal*, December 15, 1913:

The assumption of Senator Hoke Smith, of Georgia, that "the profits will ultimately pay back the original cost," is not warranted by the experiences of other countries with the telegraph and telephone. In 1869 the British Parliament thought that in fifteen years the profits of the telegraph would wipe out the cost and that large sums would be available from them for "the relief of taxes."

The companies were paying 6% dividend, which disappeared when the government took the properties. In two years losses were reported and the deficit, according to the report of the Postmaster-General, now exceeds \$4,500,000 annually. And this does not include the loss of interest on the original investment and on the money put into extensions, which, it is estimated, brings the total loss up to \$6,000,000 a year.

There was a like experience when the Government acquired the telephone, the result has been that the service has deteriorated; that no profit is shown and that the Government employes are most arbitrary in their demands. As these employes have votes they are in a position to obtain concessions from the Government which are not justified on business principles. Presumably the American labor unions would not overlook the opportunities offered by political control of the long distance telephone field, and under their domination neither cost of operation nor standards of efficiency would be considered.

(*American—Official*)

Statement by George French, author and editor, in a letter to the *New York Times*, dated October 10, 1913, and published October 13, 1913:

It happened a few years ago, during the reign of Roosevelt, that I was commissioned to examine the Government Printing Office, as an expert in printing and economics. The work was done for a Senate committee that was then looking into expenditures. About the first thing that happened to me was symptomatic of the Washington atmosphere. I asked an attendant in one of the Senate offices for a glass of water. The man looked at me with surprise written all over his face. Recovering himself, he said, "Water? Why do you wish to drink water? Look here." Then he showed me a closet full of all kinds of mineral waters, beer, and sundry other beverages, in distinguished looking bottles. "The Government pays for it. Drink whatever you like, and if your special drink is not there I will send out and get it." It was not easy to get cool water in the building—just plain water. It was too inexpensive. And the Government pays for something better, or at least more costly.

From Report of W. S. Bissell, Postmaster-General of the United States, year 1894, pp. 48-49:

It would seem that a comparatively small country, territorially, like Great Britain, with its large population, great commercial interests, and distribution of cities, would furnish as favorable conditions for the operation of a successful governmental telegraph system as any in the world; yet the report of the British Post Office Department to the House of Commons, dated November 27, 1893,

shows the cost of the plant, up to the end of the fiscal year 1893, to have been \$52,930,388. Interest upon this amount, at the rate of 2 1/2% per annum, is charged in the current account and amounts to \$1,455,584.

In the operation of the service there was a further loss of \$811,741, so that the total deficit for the year amounted to \$2,267,325. The deficiencies have been continuous since 1876, and have aggregated, since 1872, \$24,005,432, and in the last ten years the average deficiency has been nearly \$1,700,000. In Great Britain the postal service proper yields a large revenue to the Government, and so, in one sense, it can be said that it can afford the luxury of a postal telegraph. Under our postal system, however, partly undeveloped as it still remains, a telegraph system would be operated at a great loss to the Government; and this burden, it seems to me, should not be added to the Post Office Department.

If the establishment of a telegraph plant in a compact country like Great Britain would cost over \$52,000,000, what would be the cost of establishing a plant for this country? I will not stop to make a computation, but one can see at a glance that the cost would be many times that of the British plant, and the annual interest charged many times \$1,455,584; and if the loss in operation were over \$800,000 in that country in one year, I should think it would be many millions of dollars in a country the size of ours, with its unequal distribution of population.

Report by Raymond B. Fosdick, Commissioner of Accounts, in the matter of the Investigation of the Accounts of the Municipal ferries operated by the Department of Docks and Ferries, City of New York:

"Our examination shows that the net loss to the city from operation of the municipal ferries for the six years and sixty-seven days beginning October 25, 1905, and ending December 31, 1911, has been \$6,625,606.86, or an average of \$2,934.93 per day."

(*American—Editorial*)

New York *Times Annalist*, December 29, 1913:

The unanimity with which those who would socialize the railroads and the telephones, and what not else, hit upon 3% as the probable cost of capital to the government, is extraordinary. Possibly it is necessary to make it 3% for the sake of getting a profit at the end. Mr. Lewis reckons that the telephones would cost only \$900,000,000. He would a little less than double the national debt. Clifford Thorne, to socialize the railways, would increase it many fold, but always at 3%. Among the great nations of the world this one is remarkable for borrowing so little and spending so much out of current income, and its credit on that account is high, but its Panama Canal 3s have been selling this year under par. It has barely a 3% credit now. If it embarked in the telephone and railway business and began to issue bonds to replace private capital, it might not long enjoy a 3% credit.

Greeley, Colorado, *Republican*, December 19, 1913:

If the Government takes over all of the railroads and telephone and telegraph lines it must pay an enormous sum for them. And when the Government has possession, where will the taxes come from? From the home and farm owners. Government certainly will not confiscate these properties and some means must be found of raising the revenue which these concerns now pay.

New York *Financial World*, October 25, 1913:

We may be old fashioned, and a set of old fogies, but one little question arises which, we will probably be told by the uplifters and social and moral tone elevators, amounts to nothing. Nevertheless we will ask it: whence is to come the \$1,000,000,000 needed to buy up both systems of telegraph and telephone and the hundred and one independent concerns scattered all over the country from Yuba Dam to Passamaquoddy Bay? And again, if we are to governmentalize the telephone and telegraph, why not include the very necessary cable systems running to all parts of the world? It would only involve an extra \$100,000,000 or so to take in the cable systems and, don't you see, we could have

free cable tolls for outgoing business and charge all the expense to the foreigner who sends us messages?

Cleveland, Ohio, *Finance*, October 11, 1913:

In the countless investigations and appraisals of telephone property in different parts of the country, there has been a striking degree of uniformity in the values found in excess of those carried on the telephone books. In Boston, for instance, the existing plant could not be duplicated for 35% more than its present book value, according to commission report. To duplicate the telephone in New York City alone would cost one hundred million dollars more than its present book value, and so on among the great cities of the country.

The assumption of the Bell system by the Government would easily involve a billion of money and that is a large sum even for a radical Democratic Congress to swallow. Incidentally, there is the question to be considered as to whether the public would not prefer the existing status.

MISMANAGEMENT

(Foreign—Official)

British Parliamentary Debates, Official Report, April 24, 1913, p. 606:

MR. HARRY LAWSON: * * * I do not believe that any Member of this Committee can have read the history of the telephone here, as set forth in the different Reports made by Select Committees, without thinking that in many ways it is a discredit. It is to a large extent a case of meddle and muddle on the part of the State, which never allowed private enterprise free play, and yet was very slow to accept any general responsibility.

* * * We are behind all the progressive countries of the world in our telephone service.

From interview with M. Jules Roche (French Minister of Posts in 1890), member of French Parliamentary Post Office Committee, as published in the *Bulletin de l'Association des Abonnés au Téléphone* (Paris, France), for December, 1912 (translation):

A. It is unbelievable, but nevertheless true, that the Post Office Administration does not know just how much revenue the telephone service brings in. Some say 30 million (francs), others say much less than that, and still others believe that it costs more than it brings in. * * * But the State has a poor head for business; it knows neither how to buy, nor how to sell. It conducts its business very differently from the man who has put his capital into some enterprise and, wishing it to prosper, does not seek to delude himself about the financial return.

Q. Then you are of the opinion, Monsieur le Député, that a State monopoly is not a good thing for the telephone?

A. The telephone service should be left to private industry, because the State has to submit to too many influences other than the needs of the public. It is too live and important an undertaking to be ever fully developed by governmental sloth. * * *

Here is a striking example. The administration cannot secure workmen for the construction of its lines, unless it employs apprentices, because it does not pay enough. Skilled workmen prefer to find more remunerative employment.

But all this will have to come to an end. France is a wonderful country, and our genius and spirit of initiative must be allowed to develop. Some day all this will change. The State should confine itself to governing; it has enough to do if it occupies itself strictly with what concerns it, and does not seek to carry on enterprises which are not within its rightful sphere.

Report of the Royal Telephone Commission appointed to investigate the Manitoba Government Telephones (Winnipeg, Manitoba, *Telegram*, June 14, 1912):

Our investigation has convinced us particularly of two facts, one, that supplies are purchased very largely in excess of requirements; the other, that excessive prices are paid therefor owing to lack

of competition. We feel that we are amply justified in finding that supplies are purchased before need of them has arisen, by the fact that on the 1st of January, 1911, the value of supplies on hand was \$585,251.03, that during that year, supplies to the amount of \$1,332,599.82 were got, and that on the first of the year 1912 the value of supplies on hand was \$609,359.22, at least twice as much as they should have been, and we may remark, in passing, as indicating the lack of knowledge of the condition of affairs in this department by those responsible therefor, that before these figures were given to us, the chairman, in evidence, stated the supplies on hand would be about \$400,000, and the commissioner engineer said they would be about \$300,000. * * * Before leaving the subject, and as further evidence of this extravagance, we may say that, notwithstanding that completed work could not be done, 20,000 additional poles were purchased in 1911, a small part of which was included in the 162,763 poles said to be on hand in January of this year, the balance delivered or to be delivered after that, and thus swelling this account beyond all bounds. In fact, poles were in hand at the beginning of this year sufficient at 40 poles to the mile to build 4,069 miles of pole line, which is within a very little of the total of pole mileage constructed in the last four years.

From Official Report by Senator Emile Dupont on the 1912 Budget, Posts and Telegraphs, French Senate Document No. 35, Appendix to Stenographic Report of session of January 30, 1912, Pages 190-191 (translation):

Since the fusion of the Postal and Telegraph services, that is to say, since 1877, the Administration of Posts, Telegraphs & Telephones has changed its organization six times.

First the organization was under the Assistant Secretary of State, which later on was changed into a ministry. In 1887 it was changed to a Direction General, under the head of Ministry of Finance. A short time thereafter this Direction General was placed under the supervision of the Ministry of Commerce. An Assistant Secretary of State was re-established in 1896. The Assistant Secretary of State remained under the direction of the Ministry of Commerce until 1896, when he was transferred to the Ministry of Public Works. In 1909 the position of Assistant Secretary of State was abolished and the management of the Postal, Telegraph & Telephone Services was directly entrusted to the care of the Minister of Public Works. An Assistant Secretary of State was again created in 1910. As a Direction General or an "Assistant Secretariat," the Administration has been attached to three different Ministries:

- 1st. The Ministry of Finance.
- 2nd. The Ministry of Commerce.
- 3rd. The Ministry of Public Works.

Such instability is plainly reflected in the methods and programs of the Administration.

From the Report of the Royal Commission appointed to Investigate the Postal, Telegraph and Telephone Services of the Commonwealth of Australia (ordered to be printed October 5, 1910):

Central Executive responsible for congestion.

32. Your Commissioners consider that the Central Executive in neglecting to exercise ordinary foresight by making the necessary provision to meet the demands of the public when the telephone rates were reduced in 1907, and in failing to profit by the experience of other countries in similar circumstances, is responsible for the congested state of the telephone service, and the consequent overworking of the officers of the Department. The evidence discloses that the reductions in the telephone rates were made on the advice of a subordinate officer, and in opposition to the advice of the Permanent Head and Chief Electrical Engineer, and your Commissioners consider that the then Postmaster-General took action without having any sound reason for the drastic reduction made.

Reductions opposed by Permanent Head and Chief Electrical Engineer.

* * * * *

Continuity of policy.

40. In the administration of the Commonwealth Post and Telegraph Department it is desirable, in the interests of the public, that continuity of policy should be maintained. The Central Executive attempted to formulate a definite policy; but it was alleged that a continuous policy could not be exercised by the Department because of its incompatibility with frequent changes of the Ministerial Head. There have been

nine Postmasters-General since the inauguration of the Commonwealth, and the evidence discloses that most of the Ministerial Heads endeavored to effect signal alterations of policy. Ministers are apparently anxious to signalize their occupancy of office by some new and distinct act of administration; but due regard does not appear to have been paid to the effect of such actions.

* * * * *

Post and Telegraph
Department not
to be used for
political purposes.

Delays in the execution of administrative duties are also occasioned by the enforced absence of the Minister from his Department on political business.

From the Report of the Committee of Finance, France, appointed by the Senate to examine the Postal and Telegraph Budget for the year 1910 (translation):

The failure to conduct the Postal, Telegraph and Telephone Service of France upon commercial principles is the real cause of the inefficiency and backwardness of the Department. * * *

For many years the operating plant, especially the telephone apparatus, has not kept pace with the progress of the art, and local service has been neglected. * * *

A careful study of the present budget, and of many preceding ones, proves that the inefficiency of the service is not due to isolated faults, but to the continued use of bad methods which must be eradicated.

From Official Report on the French Budget for Posts and Telegraphs, 1908, pages 11-13, by Joseph Noulens, then Member of the French Chamber of Deputies, now Minister of War (translation):

Despite the diversity of its operations, the Postal, Telegraph and Telephone Administration has not known how, or has not desired, to apply the principle of specialization of work, of which modern industry has given examples and demonstrated the advantages.

* * * * *

A clerk who has sorted letters in an office for ten years is appointed head clerk in the telegraph or telephone service; he will be intrusted with the direction of services which, up to then, had been totally strange to him; his duty will consist in supervising a staff of operators, though he is ignorant of the manipulation of the modern instruments, and sometimes of all the instruments.

* * * * *

A clerk who has been occupied for 15 years in directing deliveries of mails or in marking postal savings-bank pass-books is promoted to the position of inspector of the technical service, and in this capacity is charged with constructing lines, performing electrical work, etc., all things which he has never heard of before, things he will neglect or do badly. He will prefer to confine himself to clerical work which will be as nearly as possible like the work he was in the habit of doing.

(Foreign—Editorial)

The Times, London, England, December 20, 1913:

Sir,—As the treatment which I have lately received from the London Telephone Service is no doubt typical of that meted out to other unfortunate subscribers, my experience may probably be of interest.

After an unsatisfactory correspondence with reference to the removal of an instrument from a house which I was giving up I wrote the service on October 28 stating that I had taken a new house and wanted an instrument installed there for use as from December 20. To this I received the usual formal acknowledgment and intimation that the matter would receive "immediate attention." Not hearing further I wrote again on November 21, and again on December 2, without securing any reply at all, although I besought them in the latter communication to tell me what course I ought to adopt to obtain a reply. Thinking I might manage to do some good by a personal request, I to-day rang up the department at 102, Dean-street, which was supposed to be attending to the matter, and the

clerk to whom I spoke affected to be deeply concerned and promised me faithfully that the whole correspondence should be looked into and that I should be rung up within an hour—and that is all that has so far happened.

Yours, etc.,

26, Ely-place, E. C.; Dec. 18.

M. GRUNBAUM.

The Times, London, England, November 22, 1913:

A curious instance of the zeal of the department is reported. A local hostelry was formerly on the exchange, but the service was discontinued more than two years ago. Twice within the past fortnight workmen have called there in order to examine the instrument "because complaints had been received that the subscriber could not get through."

The Daily Mail, London, England, July 18, 1912:

Users of the telephone will read with astonishment the figures contained in Mr. Herbert Samuel's statement defending the Post Office management of the London telephones. It is something, no doubt, after the optimistic assurances of the past, to find the Postmaster-General admitting that the present situation is "not satisfactory" and that the Post Office operators do sometimes make mistakes. But he minimises the grievances of the public and can give no guarantee of reform till the date when all the difficulties caused by the transfer of the National Telephone Company's system have been overcome. Six months have already passed and there has so far been deterioration, not improvement. At this rate we cannot expect a reasonably efficient service much before the millennium. Yet if skilled operators are not available in sufficient number, as Mr. Samuel pleads, the entire responsibility rests with the short-sightedness and parsimony of the Post Office. It took no steps whatever in advance to meet the needs of to-day by training men and women for the work. Consequently the system is now both understaffed and inefficiently staffed, and the subscriber's temper is sorely tried.

The Daily Mail, London, England, July 5, 1912:

It is now six months since the Post Office undertook the working of the telephone system of the country. And it might be supposed that in that time the difficulties consequent on the transfer of such an immense undertaking would have been overcome; that the smooth working of the service would have been brought about; and, above all, that some of the improvements expected when a Government department, with all its resources, takes over a great organization would have been realized. But the reverse is the case. Complaints of inefficiency, delay, mismanagement, "wrong numbers," and inattention against the Post Office are increasing in number, not diminishing.

From the Port of London Authority to the small business man and shopkeeper, everyone is making the same complaint, that "the service is deteriorating."

Letter in the *Daily Mail*, London, England, June 27, 1912:

Sir,—On March 25 the telephone contract for my Wimbledon house expired. On March 18 I was cut off with a view to installing another instrument at my new house at Kingston-on-Thames. The telephone authorities asked to let them have fifteen days' notice to enable them to put in the new telephone, which notice I gave at once.

From that date till now no instrument has been installed (although it is installed in a house within 200 yards of my own), but I have received a remarkable series of eight communications, of which I give a summary:

1. Immediate payment demanded for my non-existent telephone.
2. Legal proceedings threatened to recover the money, which is payable in advance.
3. A promise of immediate attention to my protests.
4. A series of comminatory telephone conversations to and from my city office, followed by
5. A notice cutting off my still imaginary telephone, and again legal proceedings promised.
6. The scene then changed and I received a supplicatory letter asking me to use my good offices with the local authorities in the matter of wayleaves (which I did).

7. A penitent promise to compensate me for the delay by post-dating my next contract.

8. (On June 18) Two forms arrived threatening immediate proceedings unless my subscription was paid at once. To these I replied that their office was evidently in a state of hopeless disorganization and that I should reply to no more communications.

To this I have had no answer at present, but it will probably come in the shape of a bill for excess calls.

HERBERT M. ELLIS.

Beverly Wood, Coombe, Kingston-on-Thames.

The *Daily Mail*, London, England, January 31, 1912:

While Mr. Herbert Samuel is touring the country and delivering political speeches in which he complacently congratulates himself and everybody upon the supreme efficiency of the Government, the administration of his Department is going from bad to worse. Thus is Mr. Bonar Law's charge of incompetence against Ministers justified by the practical test. It is less than a month since the Post Office destroyed its sole remaining competitor in the telephone service and took over the National Company's system. But already complaints are heard from every quarter of a marked decline in the efficiency of the telephone. One subscriber writes that "the service is in a state of chaos." Callers cannot get through; wrong calls are constantly made; wrong numbers are frequently given; and the method of keeping accounts appears to be fantastic. Moreover, the service on the old Post Office system has become perceptibly slower. More time is occupied at the exchanges in making the connection, and the caller is too often put off with "line engaged" or the detestable buzzing instrument.

* * * * *

When the House of Commons meets next month Mr. Samuel should be required to take immediate steps to call his Department to order. We cannot but think that he would turn his energy to better purpose by attending to the business which the nation has committed to him instead of going about the country delivering orations on the absurd Insurance Act.

Bulletin des Abonnés au Téléphone (Telephone Subscribers' Bulletin), Paris, France, February, 1909, p. 3 (translation):

Something is rotten in the state of Telephones. The knife should be applied by the Chamber without hesitation.

Only a thorough Parliamentary inquiry such as was held in connection with the Navy can disclose the cause of the trouble, and after having heard the representatives of the staff, the subscribers, and outside experts, we shall be able to reorganize this anarchical Administration, fix responsibility, * * * and draw up a serious program of reform.

We have floundered long enough in a mess which daily grows worse.

STAGNATION VS. EXPANSION

(Foreign—Official)

From the Chicago, Illinois, *American*, February 4, 1914:

"We have governmental ownership of telephone, telegraph and postal systems at home," said Othon de Fejer, chief of the (Hungarian Government) telephone department. "I do not approve of this system so much as privately owned companies because the government does not canvass for business and extend the systems, which of course is the thing which makes them valuable to the people."

British Parliamentary Debates, Official Report, April 24, 1913, page 577:

MR. HERBERT SAMUEL: * * * Although we are not far behind Germany, and are much

ahead of France and most of the Southern Continental countries, the telephone here is very inadequately developed compared with the United States, or Canada, or the Scandinavian countries.

British Parliamentary Debates, Official Report, April 24, 1913, p. 592:

MR. GOLDMAN: The United States put in last year no fewer than 749,000 telephones. We increased our service by fewer than 38,000 telephones. In other words, the United States in one year increased their service by more than the whole service of this country.

Article by C. S. Goldman, M. P., in the *Daily Graphic*, London, England, March 3, 1913:

To-day the question is, "Are you on the telephone?" Under progressive control the question would be, "Surely you are not off the telephone?" In other words, the telephone should be a matter of commercial and social necessity instead of, as at present, an article of luxury. If it were necessary to seek for a fair ground of condemnation of existing management, one would have need to go no further than the "rates" question. The Government have done absolutely nothing in this pressing matter, and this in spite of all the pressure put upon them by public bodies and private interests.

The London, England, *Electrician*, January 17, 1913, p. 738:

Last week a deputation from the Town Councils of Dundee, Aberdeen, Arbroath and Montrose, and Chambers of Commerce and other bodies in these towns, waited on the Postmaster-General (Mr. H. Samuel) to urge upon him the necessity of extending the underground telegraph cables from Edinburgh to Dundee and Aberdeen.

* * * * *

In reply, Mr. Samuel said the extension of the underground telegraph cables to Dundee and Aberdeen would involve a capital cost of £130,000, which would mean an annual charge for interest and sinking fund for 15 years of £11,287. The total gross telegraph revenue in Dundee and Aberdeen was £16,000 a year before deducting any expenses or charges. The deputation were asking for an annual expenditure of more than two-thirds of the gross revenue—he did not know that there was any net revenue—in order to avoid occasional delays. There was a loss in the telegraph system of the country of over £1,000,000 a year, and therefore one had to look carefully at any additional expenditure.

British Parliamentary Debates, Official Report, August 17, 1911, p. 2118:

MR. PETO: * * * The Government have indicated to the House that they rather look to the United States of America as a model of what we are to do in this country. If that is so, I think it would be quite in order to put briefly before the House what that standard is we are going to try to reach. The standard in the United States is 76 per thousand persons, whilst here it is only 15. In order to reach the standard of the United States, which is obviously very largely a question of the development of telephones in the enormous rural areas, we should have to increase our telephone stations by 2,500,000, and we should have to spend £76,500,000 at the rate of £30 per station.

From British Parliamentary Debates, Official Report, August 16, 1911, p. 2007:

MR. HERBERT SAMUEL: * * * You cannot, irrespective of loss, run your telegraph system into remote, thinly-populated districts without a full guarantee. My hon. Friend persuaded my hon. Friend and colleague the Assistant Postmaster-General, who perhaps may be more softhearted than myself, in the kindness of his heart to represent the matter to the Treasury. I am not sure that I should have gone so far, but the Treasury having gone into the matter came to the conclusion, which I came to some time ago, that there was no cause for charging the general taxpayers of the country with this particular extension. I am afraid, in view of the action taken by the Treasury, I cannot favor the telegraph being extended to that place.

Statistics compiled from official reports (published, or by exchange of correspondence) of the various governments, giving the number of telephones per 100 population in European communities,

and showing how European governments have exploited the larger and more profitable places, and under-developed the smaller and less profitable ones:

<i>Country</i>	<i>No. of Telephones per 100 pop. in exchanges of over 100,000 population.</i>	<i>No. of Telephones per 100 pop. in exchanges of less than 100,000 population.</i>	<i>Proportion of rural to urban development</i>
Austria	2.6	.30	11.5%
Belgium	1.8	.36	20.0%
France	2.3	.47	20.4%
German Empire	4.6	1.20	26.1%
Great Britain	2.7	.76	28.2%
Hungary	2.6	.25	9.6%
Italy	1.2	.14	11.7%
Netherlands	3.0	.74	24.6%
Sweden (private operation in Stockholm)	15.7	2.65	16.9%
Switzerland	6.0	1.85	30.8%
Total of above countries	3.16	.67	21.2%
United States	11.40	8.50	74.6%

British Parliamentary Debates, Official Report, June 19, 1911, p. 87:

MR. PETO: * * * I want to say a word or two about the comparison with the United States of America, which is constantly made by the Post Office in their literature. I understand in America there are seventy-six telephone subscribers per thousand of population whilst in this country there are only fifteen per thousand. It is obvious we have a great deal of leeway to make up before we arrive at that standard.

Statement of Deputy Joseph Noulens, Reporter of the Committee of the French Chamber of Deputies on Posts and Telegraphs (as published in *Le Journal*, Paris, reprinted in the *National Telephone Journal*, London, England, September, 1908, p. 24):

Dominated by the routine methods which are so characteristic of it, the Administration has not foreseen the rapid development of the telephone. Why should it seek to popularize this method of communication, since, from the Administration point of view, it appeared to be a luxury reserved only for the few?

(Foreign—Editorial)

Indianapolis, Ind., *Star*, December 25, 1913:

Representative David J. Lewis, of Maryland, who advocates Government ownership of telephones, proceeds properly in assuming as an abstract consideration that use runs inversely as the rates, but this statement that the United States ranks ninth among the nations of the world as user of telephone does not agree with the review of state owned telephones contributed to "Concerning Municipal Ownership," by Sydney Brooks, a Londoner.

* * * * *

Mr. Brooks assumes that there are sixteen millions telephones in use in the world, of which twelve millions his estimate are on the North American continent. Europe by his estimate has only three millions. He declares that, roughly speaking, there is a telephone for every nine Americans, and if the same proportion obtained in Europe, Denmark would have three times as many telephones as she actually possesses; Sweden three and one-half times; Norway four and one-half times; Switzerland five times; Germany six and one-half times; Great Britain seven and one-half times; the Netherlands eleven times; Belgian nearly eighteen times as many; France nineteen times; Austria all but thirty times; Hungary thirty-seven times; Italy fifty-six times; Portugal and Spain about ninety times; Russia one hundred and five times, and Greece, Servia and Bulgaria over one

hundred seventy and two hundred four times as many. State ownership, he declares, is to blame for the puny development of the telephone as a commercial necessity and social convenience in Europe. Service there is inferior and the equipment, in antiquated type mostly of the magneto telephone, generally discarded in this country.

Public expenditures of the telephone are restricted through a mistaken sense of economy on the part of governing officials, and the indiscriminate granting of working licenses to municipalities and individuals has forbidden development by private investors.

* * * * *

American experts in telephony cite the disparity of service units in this country and abroad as explaining the difference in prevalent rates, on a theory which they maintain by a plausible chain of reasoning, that as the number of stations increases the cost of the individual station rises.

The Times, London, England, December 1, 1913:

As the result of a short-sighted Government policy, of official mismanagement, and the parochial attitude of local authorities, the number of telephones per hundred of the population in Great Britain to-day is 1.4, as against 1.6 in Germany, 2.1 in Switzerland, 3.5 in Denmark and Sweden, 3.7 in Canada, and 8.1 in the United States. London, the greatest city in the world, boasts 2.8 telephones for every hundred of its inhabitants, as against a percentage of 5.3 in Berlin, 11.0 in Chicago, 19.9 in Stockholm, and 24.0 in Los Angeles.

Letter to the London, England, *Daily Mail*, September 2, 1913:

SIR: It may interest and perhaps surprise some of your readers to learn the cost of a telephone in a country district in England.

My house is situated within a radius of four and a half miles of the exchange at Bury St. Edmunds, and in answer to my inquiry, I am informed that "the annual subscription would be approximately £40." As I believe that there is no extra charge for any telephone within a mile of the exchange, it means that I am to be charged at the rate of £10 a year for each mile of extension.

My only hope of ever having a telephone here is that I hear the Postmaster-General is now on a visit to America for the purpose of studying the telephone business. I suggest that on his return night schools should be established where telephone officials might be taught something about telephones.

J. S. AUSTEN.

Plumton House, Bury St. Edmunds.

From the London, England, *Times*, July 20, 1910:

Great Britain at the beginning of this year had 602,209 telephones in service, so the American Bell system gained in one year more telephones (nearly 30 per cent. more) than have been installed in Great Britain since the telephone began. The total number of telephones in the Bell system is $8\frac{1}{2}$ times greater than in the British system. Allowing for difference in population, there are more than four American telephones to one British telephone. This disparity is increasing rapidly in favor of America, as the development of the American system is increasing just twenty times more rapidly than that of the British system. If the comparison is extended to the whole of Europe, it is found that the Bell system has just twice as many telephones as all Europe. The entire group of twenty European countries with an aggregate population of 405 millions can only muster 2,583,000 telephones as against the 5,142,692 telephones of a single organization in America, serving a population of between 80 and 90 millions. The telephone development in proportion to population is therefore ten times higher in America than it is throughout Europe.

From the London, England, *Times*, July 20, 1910:

In Europe the general existence of State telegraph monopolies has doomed the telephone to a Cinderella-like existence, and no fairy prince has yet appeared from among the ranks of the politicians with sufficient insight to recognize the possibilities of the suppressed and harassed telephone and to

secure them full scope. The fortunate Americans have no State monopolies, and both telegraph and telephone have been left to work out their own salvation as industrial enterprises.

Under these conditions the telephone service has experienced a prodigious development. The wonderful facilities provided by a system of instantaneous and direct communication appeal readily to such a practical people as the Americans, and the efficiency and scope of the telephone in America have been so steadily improved and extended that the telephone service has become part of the daily business and social life of the people to an extent unapproached in any European country.

Extract from "Public Finance," by C. F. Bastable, Professor of Political Economy at the University of Dublin, Ireland (3d Edition, 1903, Book II, Chapter 3, Pages 210-211):

The dealings of state agencies with new inventions are the worst blot on public administration, and it seems that there is this risk in the state telegraphs, that though they are quite up to the standard at their inception, they almost insensibly fall behind as it advances with growing knowledge. This consideration belongs to economic policy rather than finance, which, however, suffers from any hindrance to commercial expansion and is certainly not likely to gain by state telegraphy.

(*American—Editorial*)

Boston, Mass., *Advertiser*, December 22, 1913:

Another serious objection to Government ownership is that under it expansion would be much slower than at present. The telephone companies are pushing their lines constantly into new territory and opening up a larger part of the country. Very few will contend that the Government would attempt to extend its lines into new sections except after petitions had been brought by the people therein. And even then a vast amount of red tape would have to be unrolled before anything would be done. In other words, instead of leading the demand, the Government would follow it, which means a great deal to the development of the country. * * * The initiative of private enterprise always has been far greater than that of the Government, in any line, for a number of reasons. And it is difficult to see how this can be changed, because of the absence of direct responsible authority in Government matters, and the divorce between the operating and financial departments. Nothing could be done until the money had been provided and the delay in Congressional appropriation is proverbial.

Northampton, Mass., *Gazette*, December 18, 1913:

As a private enterprise the telephone company is very successful and is also very accommodating to public well being. The American telephone system will, in 1913, have gross revenues of close to \$220,000,000, which means a gain during the last six years of \$90,000,000, or 70%. The balance of net profits for dividends will be around \$50,000,000, compared with \$30,000,000 during 1907. The Bell system is devoting 31 cents of every \$1.00 of gross to maintenance and depreciation, which means an outlay of close to \$70,000,000 during 1913.

New York *Journal of Commerce*, December 12, 1913:

When a large sum of money has been embarked in plant adapted to a specific purpose, the public administration always looks with disfavor on any new invention that may involve the scrapping of that plant. While the same may apply to any large private enterprise, nevertheless while the field is open competitors with no accumulative plant are always to be found ready to risk their money in exploiting the new idea on the chance of reaping immediate profit.

New York *Commercial*, November, 1913:

If the city of New York or the Federal Government at Washington owned the telephone system of the municipality or the nation, as the case might be, and should make such ample provision for future needs as the private corporations are now in the habit of doing, the cry of graft and extravagance would be raised at once. No administrator of public affairs would dare to spend money intelligently in this way.

Extract from an article by Dr. Jacob Gould Schurman, President of Cornell University, published in the *New York Tribune*, February 25, 1912:

The most that any government has ever done is to provide honest and efficient officials for the conduct of public business along lines already established and by the use of methods and agencies already familiar in private business. Creative epochs in industry are the work of individuals, not of governments.

FINANCIAL CONSTRICTION

(Foreign—Official)

British Parliamentary Debates, Official Report, April 24, 1913, pp. 593-594:

MR. GOLDMAN: * * * Take the trunk (i. e., long distance) service to which the Postmaster-General also referred. There was an exclusive monopoly. The Government have been running the trunk service for fifteen years and we can test their intentions and activities by their work in connection with that service. If we look at the records we see in the figures relating to trunk service the rapid development which is characterising itself in all branches of telephone services abroad. I find that in the years 1910 to 1912 there has been no actual increase. There has actually been a drop in construction which also coincides with a decrease in the additional circuits that have been added to the service. In 1910 the expenditure in respect of the service was £371,776; in 1911 it was £279,855, and in 1912 it was only £255,000. In other words, the expenditure on the trunk service has declined by no less than one-third. In 1911 they added no fewer than 182 fresh circuits; in 1912 there actually is a reduction down to 145. During this period there has been a steady increase in telephones in the local areas and it is an elementary fact that the more people use the local service, the more people require the trunk service. No doubt the Postmaster-General did recognize the neglect of his own service in the matter of these trunks, because he suddenly came forward last year and stated to the House that he intended to spend in the coming year £1,000,000 on the trunk service. Again, the promise of the Postmaster-General in that respect has not been realized, because, instead of having spent £1,000,000 as he intended to spend, on the trunk service, the expenditure only amounted to approximately £500,000.

British Parliamentary Debates, Official Report, April 24, 1913, pp. 592 ff.:

MR. GOLDMAN: * * * The United States * * * spent last year no less than £8,000,000 on additional plant, and propose to do the same this year, as compared with the insignificant amount which the Postmaster-General now proposes to spend on the telephone service.

* * * * *

This continued delay in carrying out necessary construction is most discouraging to those who had hoped for efficiency in the Post Office management.

* * * * *

When we faced the Postmaster-General last year with our criticisms, he silenced us by saying that he intended to spend £2,700,000 on the telephone service this year. Again he has not fulfilled his promise.

From the Report of the Royal Commission Appointed to Investigate the Postal, Telegraph and Telephone Services of the Commonwealth of Australia (ordered to be printed October 5, 1910):

Position getting worse.

45. The starved condition of the services is largely answerable for the imperfect working of the telephonic and telegraphic installations.

Alleged want of funds.

46. The reason assigned by all the officials for the failure to place the services in proper working order was want of sufficient funds. There is evidence that the Department in 1901 endeavored, through the Treasurer of the time, to obtain the necessary funds to place the services in an efficient condition by resorting to a loan, but Parliament refused to sanction this proposal. The curtailment of funds at that period was apparently the result of the desire to keep the cost of Federation within a limit of £300,000 per annum. The adoption of that course, in spite of the demands of the Post and Telegraph Department, is, in the opinion of your Commissioners, evidence that the system of management is faulty, in that it permitted the Treasurer to assume financial control of services for whose efficiency he was not responsible. This aspect of the position is emphasized by the fact that the Treasurer was at that time aware of the necessities of the Post and Telegraph Department, notwithstanding which he returned to the States Governments the whole of the surplus revenue beyond their constitutional proportion. * * * The Central Executive, though representing to the Postmaster-General the omission to supply sufficient funds, should have more persistently urged upon him the results that would occur from a continuation of the starvation policy. This matter will be further dealt with in the financial section of this Report.

Effect of curtailment of funds.

* * * * *

No improvement in construction methods.

115. The result of unduly curtailing expenditure was pointed out repeatedly by the Department, and the required provision was made on the Estimates, but was reduced by the Treasurer. The longer reconstruction is deferred and the longer installation of a new system is postponed the more expensive the work becomes, on account of extensions made to the old system. Construction methods were found to be practically the same as in 1901 as the Department claimed it had been impossible to improve those methods since that date, although the adoption of improved methods would obviously have tended toward economy. It may be mentioned that between 1886 and 1904 the New York Telephone Company's plant was reconstructed three times to bring the equipment up to the highest standard, and to render the service more efficient. From 1900 to 1907 the Bell Telephone Company, United States of America, spent about £70,000,000 on telephone undertakings.

From speech by Deputy M. T. Steeg, in the French Chamber of Deputies, Session of June 23, 1910 (French Senate Document No. 165):

The history of the telephone is only the story of successive programs, very brilliantly conceived, but never realized for lack of resources.

(Here Deputy Steeg reports a series of transactions indicating how the administration of telephones by the French Government has been hampered through financial constriction, and goes on to say):

Next M. Millerand took up the study of the bill, completed a program of reforms and was looking for a disinterested person who would lend him the 100 million francs needed to effectuate the plan. Not being able to borrow for the needs of the services, the Administration asked the Chamber of Commerce of Paris to do what the Administration was incapable of doing.

(Foreign—Editorial)

Le Journal des Transports, Paris, France, December, 1912 (translation):

We said the State is a very poor businessman indeed. It is also a wretched financier. The

report of M. Dahmier, a radical who cannot be suspected of republicanism, furnishes us startling proof of this.

* * * * *

It is not necessary to add any more. The criticisms directed against the Postal, Telegraph and Telephone Administration in the Chamber and before the Budgetary Commission, will, alas, be useless. All the irregularities, all the imperfections we have pointed out, are inherent in the system of operation by the State, of services for which it is unprepared. We repeat again and again that the State was not meant to be a business man. The criticism of the Post, Telegraph and Telephone Administration can be applied equally to the Powder monopoly, the National Printing Office, the Match monopoly, the Arsenals and the State Railway Administrations.

New York Press, June 21, 1910:

Telephone interests here are watching closely developments in Germany, where criticism has been provoked because the supplementary budget for telephone purposes amounts to only 25,000,000 marks, as compared with 44,800,000 marks in 1907, 60,000,000 marks in 1908, and 45,000,000 marks in 1909. It is contended that the Post and Telegraph Department of that country is too parsimonious, and, in asking for so small an amount, has not paid proper attention to the need for improvement and extension of its system.

The Times, London, England, July 20, 1910:

The public of European countries finds itself denied a highly developed and efficient telephone service, and thereby suffers incalculable daily loss. European capital goes freely to America to develop the telephone there, but the European politician and the European Government official refuse to allow European capital, or any other, to develop the telephone in Europe.

(American—Editorial)

Extract from the report by S. Gale Lowrie (appointed by the Wisconsin State Board of Public Affairs, 1912, to study Budget systems):

It takes but a small minority to block an appropriation. A slight majority in one house can refuse a grant for a service which the entire lower house, part of the upper house and the governor earnestly desire. This is a minority rather than popular control. The theory that the annual system of appropriations increases the control of the people over appropriations harks back to the time of limited appropriations for royal services and has no place in our modern legislative systems.

Frequent comparisons have been made of late between governmental work and that of a business enterprise, and although there are well recognized differences between them there are many points of similarity. It would be impossible to conduct any industrial enterprise upon such a policy of temporary planning as the limited method of support implies. Every large project must have a design carefully thought out and running through a period of years, and in order that a plan may have permanency it must have a method of support which is not likely to be interrupted at frequent intervals.

TAXATION

(Foreign—Editorial)

New York Times, December 18, 1913:

England's postal telegraph has produced a deficiency of £17,455,861 sterling in order to make the British postal telegraph a success. The taxpayers have paid a deficit averaging £400,000 for forty years and are now paying at the rate of £840,000.

(*American—Editorial*)

Chicago, Ill., *Farm and Home*, January 1, 1914:

Admitting both the merits and demerits of the present system, unless cost of service were less under government ownership than at present, rates could be no lower unless the deficit was made up by general taxation. Higher taxes to offset the loss in the transportation department would be unpopular indeed.

There is no magic in ownership and operation of utilities by corporation or by township, county, state or nation. It is a question of management. Receipts must be enough to pay all expenses or the deficit must be made up otherwise. Either way the public has to bear the cost.

The peasantry of County Cork said when home rule seemed imminent years ago: "We will neither plow nor plant because now the Government will support all of us." The Government is the people. Sometimes it is easier to supervise and control than to operate.

Boston, Mass., *Herald*, December, 1913:

It ought to be understood by all intelligent people that everything performed by public agencies, whether of city, state or nation, costs 50 per cent. more than the same service done under the support of self-interest and private initiative. And that extra 50 per cent. the public must pay for not necessarily in prices immediately affixed. The excess usually comes out of general taxation and is widely diffused.

Syracuse, N. Y., *Herald*, December 18, 1913:

If the Government should take over the telegraph lines and cheapen the rates of service, the real beneficiaries would not be the mass of the people, but only a relatively small proportion thereof. Whatever else might be said to the principle thus put in practice, it certainly could not be called the principle of the "greatest good to the greatest number."

Extract from the address of Seth Low, President of the National Civic Federation, delivered at its Fourteenth Annual Meeting in New York City on December 11, 1913:

I make no apology, therefore, for pointing out briefly, on this occasion, some of the difficulties attaching to government ownership and operation of railroads in a country like ours, with a Federal government evolved as ours has been, covering half a continent. Such information as I can command leads me to believe that in Germany, France, Australia, Italy and Austria, the earnings of the state-owned railroads in each country barely equal, if they do equal, the sums paid in taxation by the railroads of the United States.

Providence, R. I., *Daily Journal*, October 12, 1913:

How many of the farmers and the working men of the United States use the long distance telephone and telegraph? This is a question that has not been answered. Probably very few are interested in rates because they are not called upon to have long distance conversations. But if the Government should duplicate the existing trans-continental lines at an expense of several hundred of millions of dollars, no one could escape the heavy tax levy. Why should a man who has no use for long distance messages pay taxes for a government telephone system?

Extract from an article in *The American City* (New York), April, 1913, by George C. Whipple, Consulting Professor, Brooklyn Polytechnic Institute:

The recent special report of the Bureau of the Census on financial statistics of cities of over 30,000 inhabitants * * * showed that in 145 cities the annual revenue receipts had increased in eight years from \$20.12 to \$27.24 per capita, a gain of 35.4 per cent. The payments for expenses and interest increased from \$16.37 to \$20.53 per capita. The governmental costs were higher in the larger cities. In New York City the budget appropriations were \$26.90 per capita in 1900 and \$34.30 in 1910. The report also shows that in many cities, and especially in the larger ones, the bonded indebtedness is increasing alarmingly.

As long as the cities continue to grow and assessed valuations continue to increase, the danger ahead is not so easily discerned; but what will happen when our cities cease to grow, when the interest on the debts incurred begins to bear more heavily on the taxpayers? Will the remedy be retrenchment or repudiation?

Were the trouble confined to cities the case would be bad enough, but it is not confined to them. State debts are increasing, and county debts, and debts incurred by metropolitan districts and by public service corporations. Thinking people are becoming troubled as to how these debts are to be paid.

EMPLOYEES

(Foreign—Official)

Hull, England, *Eastern Morning News*, November 24, 1913, reporting a mass meeting of postal employees at Hull:

J. MCCARTHY (Chairman of the Postal Telegraph Clerks' Association): * * * The Committee told them that in spite of repeated challenges to the staff no evidence was brought forward to support the proposition in the matter of wages, and that the Post Office servants suffered no disadvantage as compared with other workers. He wanted to say that that was not true. His own association, the Postal Telegraph, proved up to the hilt that the telegraphists employed by the private cable companies were in receipt of something like 30 per cent. higher wages than the Post Office workers.

News item in the *Daily News and Leader*, London, England, October 28, 1913, reporting a meeting of representatives of the various postal unions:

Mr. Stewart, secretary of the Postmen's Federation, explaining the objects of the conference, said the postal unions should join together in order to fight "the common enemy." He was sorry to have to refer to the Postmaster-General as the "common enemy," but it was no use mincing words. If there was one thing which had made it necessary for them to consider amalgamation it was the publication of the Holt Committee's report.

Article by L. G. Chiozza Money, M. P., published in the *Daily News and Leader*, London, England, October 10, 1913, referring to the report of the Holt Committee on Post Office Servants, Wages and Conditions of Employment:

* * * But the Committee use a very poor argument when they say that the Post Office has "no difficulty in recruiting a sufficient number of persons competent for the duties they have to perform." That is the excuse made by every bad employer. Never was yet a sweater who did not assure you, and truly, that his victims were eager to take his pay, and that he could get heaps more at an even lower rate.

Resolution passed by the executive committee of the Amalgamated Society of Telephone Employees, published in the *Electrical Industries*, London, England, October 8, 1913:

The committee particularly emphasizes the fact that no allowance has been made for the admitted increase in the cost of living; it emphatically protests against the proposal to increase the number of working hours as applied to certain grades; and rejects as totally inadequate and insignificant such paltry modifications of pay and conditions as are recommended. Further, it calls upon His Majesty's Government to deal immediately with the existing position, which can only be regarded as urgent and dangerous.

Resolution of the Associated British National Telephone Engineers, published in *The Electrician*, London, England, October 3, 1913:

This meeting of National Telephone engineers views with grave concern the recommendations

of the Select Committee on Post Office Servants, and is strongly opposed to the acceptance of the report by His Majesty's Government, on the grounds that the recommendations would not appear to be based on the evidence tendered, and moreover the report lends itself to a harsh and prejudiced interpretation in its application to the staff transferred into the service of the State from the National Telephone Co. Many anomalies remain, such as the placing of officers in Post Office grades the maxima of which were, are, and will continue to be, according to the recommendations, below the actual salary the officers were receiving at the date of transfer; and the drafting of officers performing the same duties and borne on the same class under the National Telephone Co. into different grades under the department, much to their detriment.

The creation of artificial barriers as stumbling blocks in the lines of promotion of capable and experienced officers is regarded as a retrograde step, and highly detrimental to the maintenance of the high standard of efficiency attained under the Telephone Company. * * *

The degradation of responsible supervising officers from the major to the minor staff, the imposition of longer hours of duty and the proposed transfer of officers to a grade inferior to that which they at present occupy is considered reactionary, arbitrary and unjustifiable on any grounds.

The scales of pay and the annual increments proposed are quite inadequate, and incommensurate with the increased cost of living, conclusive proof of which is given in the recent returns issued by the Board of Trade.

Statement by Mr. L. S. Summers, organizer of the Amalgamated Society of Telephone Employees, published in the Nottingham, England, *Guardian*, August 28, 1913:

Mr. L. S. Summers declared emphatically that the conclusions come to by the Holt Committee were entirely unsatisfactory. (Applause.) The whole of the transferred staff were indignant at the recommendations arising out of the transfer from the National Telephone Company to the Post Office. (Hear, hear.) The recommendations of the Select Committee meant an increase of 2½ hours' work per week; while as regarded pay, whereas the Amalgamated Society submitted 27s. a week as a minimum living wage, the Select Committee recommended the miserable wage of 26s.—a disgrace to the Government of the country. (Applause.)

Resolution of the Amalgamated Society of Telephone Employees, published in *Morning Post*, London, England, August 27, 1913:

* * * This meeting expresses strong indignation at the unsatisfactory recommendations contained in the report of the Holt Committee. We pledge ourselves to support the Executive Committee of the A. S. T. E. in whatever action may be deemed advisable, but we are also of opinion that the Executive Committee should adopt a much stronger line of action to secure immediate redress on the many grievances still existing.

Resolution of the National Joint Committee of Post Office Employees, concerning the Report of the Parliamentary Committee on Wages and Conditions of Service in the Post Office, printed in the *Times*, London, England, August 23, 1913:

* * * this meeting declines to accept the report of the Select Committee as a proper verdict on its just and moderate claims. It emphatically states that no juggling with pence will dispose of the admitted increase in the cost of living, and it regards the proposals to increase the working hours of the staff under the guise of a concession as an insult to the intelligence of the Post Office employees.

Financial Times, London, England, April 2, 1913:

Mr. Jeffreys, an official of the Amalgamated Society of Telephone Employees, was called before Mr. Holt's Select Committee on Postal Workers' Grievances at the House of Commons yesterday, and on behalf of the staff of the National Telephone Company, taken over by the Post Office at the time of the transfer of the company's undertaking, complained that the Government pledge that no official should suffer by the transfer had, in fact, been violated. Their prospects of promotion had, he contended, been seriously depreciated.

Extract from a news item in the *Herald*, Glasgow, Scotland, March 22, 1913, giving an account of the annual meeting of the Amalgamated Society of Telephone Employees:

The Chairman, in his inaugural address, said that they of the staff of the old National Telephone Company were now in a position * * * to appreciate the effect of the many disadvantages under the new conditions of service * * *

Future prospects of the staff generally, and in particular the prospects of the electrical staff, were of so hopeless a character that many members had already given up the service in disgust. Those who, owing to the telephone industry in the United Kingdom being a State monopoly, and through various circumstances, must of necessity continue in the employ of the State, were working under State conditions with the iron of discontent searing into their souls. * * *

The main point so far as the staff was concerned was that State service had been tried and found wanting.

Extract from a resolution and comment thereon by Mr. Thomas (delegate for telephone employees) at a meeting of the Birmingham Trades Council, published in the *Birmingham, England, Post*, December 9, 1912:

"This meeting of the Birmingham Trades Council draws the attention of the Postmaster-General to the unsatisfactory condition of the staff of the late National Telephone Company, particularly in the matter of lower annual increment, lower lodging allowance, overtime rates, sick pay, and lower maxima in the various grades, and calls on him to fulfill his promise made to the employees when the Transfer Bill was in Committee; and maintains * * * that the manner in which the telephone operators had been treated is a menace to progress which cannot be tolerated."

In moving the resolution, Mr. Thomas * * * pointed out that the Postmaster-General promised that the employees should be treated not only with justice but with generosity. Mr. Thomas gave several instances of reductions sustained by telephone workers. The workpeople had been classified in a disgraceful manner, many of the first-class certificated operators having been reduced to second and third class.

From a pamphlet printed in 1910 by the Italian Postal Telegraph Clerks' Association, Hon. Filippo Turati, Member of Parliament, Italy, President (translation):

Even the foreign press has occupied itself with this problem (of the telegraph service), laughing at us merrily.

The Government, on the other hand, has inverted things; pays less for overtime labor; has done even more: paying everyone badly, it has forced the workers to struggle amongst themselves for this overtime work, degenerating into "Krumiri." And the Government is convinced that it will win much in this affair, and will make an excellent speculation. The workers have understood, and everyone knows that the masters have nothing to gain by killing and exhausting the blood of the workers. But the government does not yet understand these elementary matters, does not understand the danger that accrues to industry from tired and discontented workers which renders fraud inevitable.

(Foreign—Editorial)

From a letter from the Marquis de Montebello, President of the Association of Telephone Subscribers, to the Editor in Chief of *Le Matin*, Paris, France, reprinted in the *Bulletin des Abonnés au Téléphone* (Bulletin of the Telephone Subscribers' Association), Paris, France, December, 1913 (translation):

NOTE:—Roubaix ranks 12th in population among French cities.

Permit me to request the aid of the wide publicity of the *Matin* to call attention to the truly scandalous conditions under which the postal, telephone and telegraph services operate at Roubaix. * * * I shall speak to you only of the telephone service, adding, however, that the postal and telegraph services are no better organized.

The solitary, narrow staircase which serves the various floors is repulsively filthy and falling into ruins. The tottering railing is altogether lacking in several places. The rooms reserved for the various services are in the same state of dilapidation; the walls have not been painted or papered for several decades; the floors are rotten and enormous holes open up under one's feet; the ceilings are falling down and must be supported by timber braces and by props.

These ridiculously confined quarters are arranged in a manner contrary to the most elemental laws of hygiene and of comfort; one roasts in them in summer; one freezes in winter; the atmosphere is not fit to breathe; the arrangement of the furniture does not permit the removal of the dust that has accumulated for years; a single little door serves as an exit for about fifty employees; no measure of precaution has been taken against a conflagration, which is always imminent, unless the presence of a bucket of water can be regarded as such a precautionary measure. This bucket, however, also serves as a washstand for the whole staff of employees!

From a speech delivered at Tourcoing, France, by the Marquis de Montebello, the President of the Association of Telephone Subscribers, printed in the *Bulletin de l'Association des Abonnés au Téléphone* (Bulletin of the Telephone Subscribers' Association), Paris, France, December, 1913 (translation):

NOTE:—Roubaix ranks twelfth in population among French cities.

The lecturer speaks of the visit which he made during the morning to the telephone exchange at Roubaix, which serves Roubaix and Tourcoing. "I saw there," says he, "a prehistoric installation; the old shelf-switchboard, which has been abandoned abroad for nearly thirty years, is still in use there. The offices are arranged under conditions contrary to all the principles of hygiene and even to simply humanitarian principles. It is disgraceful, ignoble, inhuman. If a business man had such offices, the labor inspector would have them closed immediately. In the most barbarous countries," he adds, "employees are not treated as at the exchange at Roubaix." He mentions in particular that, for their only wash-stand, they have an old zinc bucket in which they have had to stop up a hole with plaster.

From the *Civil Service Gazette*, London, England, October 18, 1913, referring to criticism by L. G. Chiozza Money, M. P., concerning recommendations of the Holt Committee on Post Office Servants (Wages and Conditions of Employment):

* * * Mr. Chiozza Money is a supporter of the Government, but he does not mince matters. He states quite plainly that the argument used by the Committee, and concurred in by the Secretary of the Post Office (i. e.—that the Post Office has no difficulty in securing employees at the wages it offers)—is the argument which is used by every "bad" employer.

He thus asserts that the Post Office is a bad employer. We do not dispute the truth of this assertion. The Post Office is a bad employer, and yet the Post Office is one of the most important parts of the machinery controlled by a State which claims to be "the model employer."

The Electrician, London, England, August 15, 1913:

The condition of affairs at the present moment is much more serious from the engineering aspect, for we understand that so numerous have been the resignations from among the engineering members in what we may term the "National Telephone section" of the staff that those in authority are becoming greatly concerned. * * * The reasons for the defection are alleged to be that the engineering staff generally is dissatisfied with the conditions in their particular branch of the State service, not so much from the pecuniary side (though there is discontent on that score), but because of the lassitude and absence of "momentum" which confronts them and seems to pervade the very atmosphere. These men feel that promotion is blocked for years to come, and that what little advancement they may hope to gain will be determined by seniority in the service rather than by their engineering qualifications. They feel that any initiative or foresight they possess is of no use to them, while their work is rapidly losing that absorbing interest it once had for them. The result is, we learn, that the best of the juniors are rapidly leaving the service, while the seniors of the old service, for whom the

task of obtaining other employment is more difficult, are tending to become slack and inert through the depression of their surroundings.

The Telegraph Chronicle and Civil Service Recorder, London, England, July 18, 1913:

The better pay and prospects offered by cable companies have been instrumental in depleting B.M. (telegraphic code for Birmingham) of two capable juniors * * * who have shaken the dust of the local telegraph office off their feet and started with the Eastern Company at a commencing salary of no less than 8s. per week in advance of what they were receiving from the what-ought-to-be-but-aint model employer, and with the assurance of an annual increment worth the having and a maximum such as would positively cause the death of some of our noble administrators if it were suggested to them that Government employees, doing the same work, should have a chance to attain.

The Northern Whig, Belfast, Ireland, March 22, 1913:

We publish this morning some very interesting and important statements made yesterday by Mr. Preston, president of the annual Conference of Telephone Employees. According to his remarks, the whole telephone staff are simply disgusted with the conditions of service under the Government.

The Glasgow, Scotland, *Herald*, March 22, 1913:

* * * The State on the first serious attempt on a large scale to buy up and manage a public utility has failed to demonstrate that it is a model employer. The Government telephonist is worse off than he was when he worked for a private employer, whose first concern was to earn a dividend.

Article by the Parliamentary Correspondent of the *Daily Herald*, Glasgow, Scotland, reporting a meeting of the Telephonists' Branch of the Postal Telegraph Clerks' Association, published January 22, 1913:

MR. W. J. ASH: * * * men who have to be experts in their profession, who work on continuous and extremely responsible night duty, have the paternal incentive to good work of a maximum salary of 30s. a week. * * *

Incredible as it may seem, these men have not even been established at a regular post office rating. That is, their job is considered a sort of superior blind alley, and they are as good as shown the door after ten years' faithful service.

Manchester, England, *Evening Chronicle*, December 11, 1912:

That the employees of the National Telephone Company are anything but satisfied with their experiences since becoming State servants is indicated by the fact that a protest meeting on their behalf is being called this week in Manchester. The "ideal employer" is, in many cases, demanding lower wages and longer hours than the old company found necessary to successfully work the system. The company's employees also have another legitimate grievance. When they were taken over promotion was promised on the basis of work done, but despite the fact that they had had in their hands an overwhelming proportion of the telephone exchanges and lines throughout the country very few of the superior positions have been given to them. * * * Here, again, we have an example of broken promises and favoritism unworthy of this "model employer." * * * Neither are the public any better pleased with the change, and the net result of the transfer has been another proof of the unsatisfactory character of the much-vaunted State Services.

Manchester, England, *Evening Chronicle*, December 11, 1912:

It is customary for a certain class of writers and speakers to hold up the State as the ideal employer. * * * But it is well known that Post Office workers have many real grievances which they cannot get remedied, and now it appears that the vagaries of State management are causing seething unrest in the Labor Exchanges and the Telephone Service. The grievances in both cases appear to be quite legitimate, and they are bad enough to bring about organized effort to secure readjustment of conditions. Under-payment for the work done and preferential treatment in regard to promotions are the chief causes of complaint in both cases.

Leeds, England, *Mercury*, November 15, 1912:

A memorial submitted to the Postmaster-General on behalf of the telephone employees sets out that grave unrest exists amongst the staff all over the country, particularly amongst those employees who have been taken over from the National Telephone Company's staff.

* * * * *

The chief allegations are that the men and women employees are considerably worse off with respect to ordinary, overtime, and Sunday pay, sick pay (reduced by one-third in the case of non-established employees), and persons, while hours are longer in nearly every case.

Pall Mall Gazette (London, England), November 13, 1912. Article by Filson Young:

A little light was thrown for me the other day on the mysterious cause of the inefficiency of the telephone service. I was talking to a linesman as he ate his dinner outside one of those curious little combinations of tents and caves which establish themselves for an hour or two at the corners of London streets.

I asked him why, if the same staff had worked the system under the National Telephone Company, they could not do so with equal efficiency under the Government. "It is quite true," he said, "it is the same staff, but the conditions aren't the same. Our pay remains the same, but our conditions are less good. All our old arrangements have been knocked out and no new ones put in their place. Take my case. Under the National Telephone Company I could have gone on being promoted until I became a"—I forget what. "Now I can only go on to such and such a grade, at thirty-five shillings a week. * * *

"Now," added my friend, as he prepared to descend again into the cave, "a few people feeling like that in a service make no difference. But when you get thirty or forty thousand people all dissatisfied and all discouraged—well, the service is bound to suffer. It stands to reason, don't it?"

Birmingham, England, *Post*, November 2, 1912:

Widespread discontent has prevailed among telephone employees since the transfer of the service to the State, and meetings are being held throughout the country, under the aegis of the Amalgamated Society of Telephone Employees. Grievances, it is said, are felt in practically every department of the service, but they are declared to be more acute in the electrical and engineering sections. These departments were considered by the Post Office authorities to be unworthy of a proper grade, and a large number of the employees were classified as "unestablished workmen." Emphasis is laid on the fact that although the men in this department are qualified electricians, and that many of them have passed examinations and gained certificates, in some cases in the provinces the rate of pay has been 5½d. and 6d. an hour. Some of these engaged in these sections receive 29s. 3d. per week, but the average is considerably below that earned before the transfer.

It is further declared that the majority of the employees have to work longer hours, while the rate of pay for overtime and Sunday work has been reduced; sick pay has also been reduced to two-thirds in the case of unestablished workmen, and pension benefits have, as the result of the lack of classification, been abolished in many instances.

John Bull (British weekly published by Horatio W. Bottomley, M. P.), September 28, 1912:

Is it not a puzzle that everybody is complaining since the telephones were taken over by the State? The same staff is employed, and there is no apparent reason why it should behave differently.

Now the unseen fact in connection with the Post Office telephones is that the whole staff is a seething mass of discontent. * * * Work, pay, prospects, sick-leave, pensions—in fact, all the essentials of their careers—remain unsettled, and it is not to be wondered at if the strain on their minds interferes with their alacrity and good temper.

* * * * *

The result of all this chaos and pin-pricking is that men go about listlessly, and their overseers, being also disheartened, feel no call to remonstrate. * * * The men are loth to strike, but they feel

that they have been very badly treated and that they would be perfectly justified in taking strong measures to secure their rights.

(American—Official)

Congressional Record, January 19, 1914, page 2018:

MR. BEAKES: * * * The fault with the civil-service system, as I view it, is that when a man gets in, after a few slight and immaterial promotions, there is nothing ahead. In business circles, outside the Government service, a man begins down in the ranks and he is spurred on by the knowledge that if he shows unusual knowledge, skill, efficiency, or capacity, there is almost no limit as to how far up the ladder he may climb. There is always something ahead for him. But in the civil service, after one or two rungs of the ladder, there is a blank wall and nothing ahead.

Congressional Record, January 16, 1914, page 1826:

MR. GRIFFIN: * * * The employees in the Postal Service, and particularly the city and rural carriers, post-office clerks, and laborers, are paid only for the actual time they are employed. When overtaken by sickness or if they meet with an accident and become incapacitated for duty their pay ceases at once. It matters not if an accident was caused by the grossest negligence on the part of the Government, these employees have no redress for damages, not even for the loss of salary. They are laid off without pay until they are able to assume their official duties, and should the sickness or accident be of a nature to confine them for a period of more than 150 days they are notified to hand in their resignation, because a department rule provides that no employee will be excused for a longer period, no matter what the cause may be.

Congressional Record, January 16, 1914, page 1826:

MR. GRIFFIN: * * * It has been stated that the personnel of the Postal Service changes every seven years, and this will give an idea of the small percentage of those who do make it their life work. And now, Mr. Chairman, what is the reward for these men and women who give the best years of their lives to the public service? Well, it is hard for me to say it, because I detest ingratitude, governmental or otherwise, these employees are forced to resign when they become superannuated, unceremoniously kicked out, and told that they are inefficient and can no longer do the work required of them—outlived their usefulness. It is one of the saddest incidents of our governmental life. Thrown out with the flotsam and jetsam of humanity who have no aim or object in life, because years of ardent labor have used up their energy and vitality. Yes, Mr. Chairman, like an obsolete piece of machinery or a broken piston rod, they are thrown on the scrap heap.

Congressional Record, January 16, 1914, page 1846:

MR. REILLY: * * * It was not until I became a member of this body that I learned that old worn-out letter carriers and other superannuated employees of the Government were not retired on part pay, but, on the contrary, were dismissed from the service when they could no longer keep up the pace. One of the first letters I received after being elected a Member of Congress was from an old postal employee, who had received an official notice from his postmaster informing him that he had been off duty the allotted number of days in the year allowed by the department and that his resignation would be accepted. The simple statement of that heart broken man asking me to assist in having him kept on the rolls made my heart ache. He had spent 34 years of his life pounding the pavements in all kinds of weather and at all hours of the day and night, and was known and loved by the citizens of the community he served, composed of all classes and creeds and political affiliations. He had not only given the best years of his life to the Government in building up the Postal Service, but was at an age and in such a condition that he could not hope to find employment of any kind. He was in such financial straits that if thrown on the world he would have to depend on the bounty of relatives or friends, or else become a public charge.

What a cruel, cruel fate to leave a man to who had lived an honorable, upright life and was a model citizen. Why, Mr. Chairman, if this man had worked for a railroad company or a banking

institution or a large corporation of any kind, and was treated in such a manner, it would be the subject of public condemnation. But being a life-long employee of the Government no one seems to take more than a passing interest in him. We legislate here to curb the trusts and the railroads and corporations, and denounce them as soulless, but I believe it would be well for us to reflect and take a few leaves from the book of rules which govern them in their treatment of their employees.

Congressional Record, January 16, 1914, page 1846:

MR. REILLY: * * * I believe the Government is the poorest-paying employer in the world, and I say that intending to include therein all branches of the service from the man who receives \$800 to the man who receives \$8,000. I believe that the same service with the same ability, the same intelligence, the same faithfulness given to this Government if given to a private corporation would receive in reward double the pay on an average that the Government pays to-day.

New York Press, December 8, 1913:

Poor pay in the Government service is sending many scientific experts outside for employment, says George Otis, Director of the United States Geological Survey, in his annual report, made public to-day.

In the last four and a half years forty-one geologists have left the Government, primarily to better their financial condition. The salaries they received from corporations averaged nearly two and one-half times the salaries paid them by the Geological Survey, says the Director.

Statement by George von L. Meyer, former United States Secretary of the Navy, as reported in an article published in the Sunday Magazine of the *New York Tribune*, February 2, 1913:

I hope to see the prominent and successful men in public life in this country in the future look for private secretaries among college graduates, because in that way they can find men specially prepared and equipped. But there can be no doubt of the fact that the great majority of government salaries are inadequate and that they are not particularly attractive to ambitious and energetic young men who are capable of great things.

Statement by Henry L. Stimson, former United States Secretary of War, as reported in an article published in the Sunday Magazine of the *New York Tribune*, February 2, 1913:

The purely monetary rewards and opportunities of the government will never be so great as those offered in the business and professional world elsewhere; and if the government service is to be maintained upon a high and increasing level of proficiency, it must meet competition from other quarters by some compensating features that will attract the best talent to its service and retain it.

Statement by John C. Black, former President of the United States Civil Service Commission, as reported in an article in the Sunday Magazine of the *New York Tribune*, February 2, 1913:

Government employees who make good in scientific work, and even in clerical and executive work for the government, can always command better salaries outside the public service, and outside corporations are constantly looking for such men who have shown special efficiency.

Article in the *New York Tribune*, Sunday Magazine Section, February 2, 1913:

The son of a particular friend of Charles Nagel, Secretary of Commerce and Labor, came to him two years ago and asked him for a job.

"I'll give you this job," said Mr. Nagel; "but, in return for it, I want your solemn promise that twelve months from to-day you will lay your resignation upon my desk. In that way you will make sure of not hopelessly burying yourself."

The young man kept his promise, resigned at the end of the year, and a little later secured a good position in private life, one carrying the assurance that, if he worked hard, he would go higher and higher in the business.

In a vein similar to Mr. Nagel's, Champ Clark, Speaker of the House of Representatives, once said to a young man from his district, "My boy, you can do better for yourself by going back to the

woods at home and mauling rails than by taking a clerkship under the government. You'll get no job from me."

Statement by Frank H. Hitchcock, Former Postmaster General of the United States, as reported in an article published in the Sunday Magazine of the New York *Tribune*, February 2, 1913:

He who intends to make his work for the government a life-work must decide to endure great sacrifices financially. After a man has reached or passed a certain degree of efficiency and responsibility in the service, he finds that he gets less money for it, far less money, than is paid by business concerns for relatively the same work. I should say that he discovers that he is working for at least one-fourth, perhaps one-fifth, of what he could be making on the outside. And this is specially true because a man who does responsible work for the government is part of the biggest business concern in the world. He has to learn how, and know how, to handle tremendous problems, to become a trustworthy part of the gigantic system. He is taught to develop and exercise his judgment, and his self reliance must necessarily increase as he discharges his duties. Nevertheless, with all this equipment and ability, his salary does not rise proportionately. He recognizes that he could be making more money in other lines of endeavor.

(*American—Editorial*)

From an article reprinted in the *Congressional Record*, October 31, 1913, pp. 6517 ff:

To have and to hold a Federal position in Washington is, in most instances, to mortgage one's better prospects and potentialities in the boundless world of independent endeavor for the temporary possession of a place easy to fill and the rewards of which allure because they are never disappointing in their regularity.

* * * * *

Working for Uncle Sam, which at first is a vocation, oftentimes becomes a disease, and an incurable one. The saddest plaint one ever hears in Washington—sadder than the wail of the rejected office seeker—is that of the helpless and hopeless Government clerk lamenting his unhappy lot. He realizes that he is "in bad," and yearns for one more chance to right himself. He is in the net and can not escape. He should like to extricate himself, but that is impossible. Perhaps his head has whitened and his hands have palsied in the service, and his years of steady employment are unrepresented by a dollar saved. His fate is sealed.

* * * * *

The departments of Washington teem with professional men who are afraid to cut loose from a sure thing with the Government, be it ever so humble, to try earning a livelihood at the thing for which they are better adapted or for which they have qualified after years of preparation; but they have shrunk into moral and intellectual cowardice. Conscious of strength for higher altitudes, they strain and fret in the denser atmosphere of the monotonous plains of Government life in Washington. It is pathetic to behold them—a struggling, heartless, hopeless mass.

* * * * *

Then there is the reconciled class of Government clerks, made up of those who are content to drift with the current of clerical routine. They are pursuing the lines of least resistance. The Government gait is easy-going—no hurrying, no rushing, very humane hours, 30 days' vacation, 30 days' sick leave, two pay days in each month. "Oh, what's the use of kicking? Pretty soft, this, after all. Guess I will stick it out." So, in course of time, the reconciled clerk is lost in the great aggregate.

* * * * *

Certainly there are hundreds in the Government service in Washington that make good, just as there are hundreds who could not earn as much compensation for their labor in any other field. But there is a lamentable disproportion between those who raise themselves above the level of mediocrity and those who never detach themselves from the undistinguished mass. When one clerk climbs

to the loftiest peaks in the mountainous range of successful endeavor, 50 never see over the heads of those that make up the army on the plains below.

* * * * *

The percentage of young men who have used a position in the departments of Washington as a stepping stone to higher things is pitifully small. Of course, some have "graduated" from the departments to places out in the world, where their departmental experience was converted into a positive help, but the number who have so succeeded forms a sad and disheartening contrast with the overwhelmingly larger number that have entered the departments in Washington only to remain in obscurity.

Saturday Evening Post, September 13, 1913:

Federal salaries have not been systematically revised during all the years when cost of living has been steadily rising. One soulless corporation after another has adopted a pension scheme for its employees. The Government has none. From the insufficient data at hand it is calculated that something like ten thousand injuries to Federal employees rise every year from industrial accidents; and in compensating the victims the Government lags much behind the standards that the people through legislative action have enforced upon private employers.

* * * * *

Doctor Rubinow reports in *The Survey* seventeen fatalities and a hundred and twenty-four injuries in the rural mail delivery service, and eight fatalities and four hundred and forty injuries in city mail delivery—for none of which was a cent of compensation paid. Altogether he mentions sixteen hundred injuries, three hundred and ninety of them fatal, without compensation!

On a like record from the Steel Trust, the halls of Congress would ring with denunciation—which illustrates again that the Government, though very free with advice to others, will not conduct its own business decently.

Leslie's Weekly, March 6, 1913:

There are many * * * able, experienced public servants * * * who will have to drop out because of the change in administration at Washington. Their retirement means a positive loss in dollars and cents to the government. It is a costly piece of business to train new men. Too great a proportion of our public officers are content to be rubber stamps.

From address by Professor Thomas H. Reed, of the University of California, at the Fifteenth Annual Convention of the League of California Municipalities, published in *Pacific Municipalities*, February 1, 1913:

Herein lies the inferiority of our public service to that of other countries where merit appointment and good behavior tenure prevail for all offices, and to the service of private corporations whose self interest rigidly forces into power men broadly trained and tested by experience. We carefully select a clerk in the assessor's office, whose only duty is to drive a pen, by competitive examination, and then give the responsible work of the assessor to an amateur.

The Evening Sun, New York, January 30, 1913:

* * * Joseph Powers, who works at Station P, which is situated in the Produce Exchange, hurt his back and was laid up for eleven weeks when an iron stool on which he was working sorting mail collapsed. Powers's pay stopped the instant he struck the floor. All the money he got while he was off duty was \$8 a week, which he received from the New York Letter Carriers' Association.

POLITICAL ASPECT

(Foreign Official)

Extract from Minutes of Evidence, Second Report of the Royal Commission on Civil Establishments, presented to British Parliament, 1888:

Sir Thomas Henry Farrer, Bart*, called and examined.

20,012. * * * There is a certain difficulty in the softheartedness of heads of departments and of ministers. But there is a very much greater difficulty in the pressure which is put upon them by members of the House of Commons. That is the real difficulty: the real difficulty of the public service is getting rid of bad men, and the real difficulty of getting rid of bad men is that no minister will face the pressure which is put upon him from outside.

20,013. (*Mr. Hanbury.*) Have you had much personal experience of that?—Yes, I have, because I have been plagued all my life at the Board of Trade with inefficient men that I wanted to get rid of, but have been unable to do so.

Debate in the House of Commons on the Telegraph (Money) Bill (*London Times*, June 29, 1907):

MR. BUXTON, Postmaster General: When the charge was made against the Post Office of carrying on a telegraph service at a loss his withers were unwrung. The blame should really fall on the shoulders of the House of Commons, to whom he would say, if he could address it as an individual, "Thou art the man!" * * * He thought it was only fair to the Post Office, and it might be rather advantageous to the House, that they should know who was the real culprit. It was not the Post Office, but the House of Commons. Unfortunately there it stood.

* * * * *

MR. AUSTEN CHAMBERLAIN: Said * * * he did not think that when it (the Post Office) undertook a commercial business it should run it at a loss, and he could not see why in matters of this kind the tax payer should be expected to provide a service for the minority who used it without exacting in return some reward beyond the bare interest or sinking fund of the capital.

Hansard's Parliamentary Debates, July 6, 1905, pp. 1350 ff.:

LORD STANLEY (Postmaster-General) said the demands made by employees generally before the Bradford Committee, with the pay of all the supervising classes raised in proportion would have meant the payment from the Exchequer of no less than £2,500,000 a year. He was entitled to ask when was this to cease. Honorable Members knew better than he how they were being bombarded with applications from Post Office employees and other classes of Civil Servants for increases of wages. This had taken a form which was not illegal, but which he could not help thinking was an abuse of their rights, to wit, the form of a political threat. They had circulated an appeal in which they expressed very clearly and very frankly their intention, and it was one of which the Committee would have to take note now, or it would be much worse in the future * * * it was abusing, as it seemed to him, their rights as voters. It was nothing more nor less than blackmail. It was nothing more nor less than asking Members to purchase votes for themselves at the General Election at the expense of the Public Exchequer. Both sides would have to make up their minds that some means should be devised by which there should not be this continual blood-sucking on the part of the public servants.

From "The British State Telegraphs," by Hugo R. Meyer, 1907, pp. 133-4:

Before the Postmaster General had introduced into Parliament his scheme for improving the positions of the telegraphists, sorting clerks and postmen, Lord Frederick Cavendish, in his position as

*Served as Permanent Secretary of the British Board of Trade from 1867 to 1886, and as member of the Playfair Commission on the Civil Service, 1876.

Financial Secretary of the Treasury, had written the Postmaster General as follows: * * * "The persons who are affected by the change now proposed are, as you observe, no fewer than 10,000, and the entire postal service numbers nearly five times as many. Other branches of the Civil Service employed and voting in various parts of the United Kingdom, are at least as numerous in the aggregate as the servants of the Post Office. All this vast number of persons, not living like soldiers and sailors outside ordinary civil life are individually and collectively interested in using their votes to increase, in their own favor, the public expenditure, which the rest of the community, who have to gain their living in the unrestricted competition of the open market, must provide by taxation, if it is provided at all."

From "The British State Telegraphs," by Hugo R. Meyer, 1907, pp. 234-235:

The Chancellor of the Exchequer, Mr. Austen Chamberlain, spoke as follows: "The question at issue was not one between the two political parties. It was above parties. It was whether there was to be good economical government in the country at all, or whether the Civil Servants in the employment of the Crown could make such use of their votes, as citizens, for the purely selfish purpose of forcing the public to pay more for their services and so increase the expenditure of a great Department of State. He did not know how long they could go on in the position they had now reached, under which pressure was brought to bear on Honorable Members of all parties by their constituents. He was certain that if any scheme could be devised * * * so that they might take this question altogether out of the region of political life—not merely out of party life, but out of Parliamentary life—it would be a great advantage. It would tend to preserve the Civil Service free from that political influence and independent of the changing fortunes of party which had been their great boast and security in the past."

From "The British State Telegraphs," by Hugo R. Meyer, 1907, pp. 305-306:

Of course not all cases of intervention by Members of Parliament are as successful as was the intervention of Mr. Bradlaugh, which resulted in the promotion of eleven men out of fourteen who had been passed over as "not qualified for promotion," or, as was the intervention of the Member of Parliament whose name was not revealed, which brought about the revocation of the promotion of the ablest man in the Post Office at Sheffield. Indeed, the principal effect of these interventions is not to force the Post Office to retrace steps already taken, it is to prevent the Post Office from taking certain steps. These interventions modify the entire administration of the British Post Office. They compel the Postmaster General and his leading officers to consider the political aspect of every proposal coming from the local postmasters, and other intermediate officers, be it a proposal to promote, to pass over, to discipline, or to dismiss.

Statement by the Hon. R. W. Hanbury, M. P. ("The British State Telegraphs," by Hugo R. Meyer, 1907, pp. 177-178):

Another fact which Members ought not to overlook was the political pressure which was far too frequently exercised by Civil Servants upon those who also represented them. That was a great and growing danger. It was chiefly in London that this pressure was brought to bear. * * * He would give an instance of the way in which these Civil Servants spoke of the expediency of political pressure. At one of the great meetings which had been held, a speaker said there were 8,000 postmen in London, and that he hoped every one would have his name upon the register (of voters), so that at election times they could exercise their influence upon candidates and advocate the cause of higher wages. He was of the opinion that political pressure ought not to be brought to bear in that way. Ordinary workmen could not exercise the same power, but Civil Servants could, and, whether their agitation succeeded or not, their position was secure, so that it was a case of "Heads, I win; tails, I don't lose." * * * Before the Royal Commission (of 1888), which had inquired into the Civil Service establishments, evidence was given with regard to the way in which pressure was brought to bear in certain constituencies upon Members, and he thought that the almost unanimous feeling of the Commission was that, if this state of things continued, it would be necessary to disfranchise the Civil Service.

From "The British State Telegraphs," by Hugo R. Meyer, 1907, p. 305:

If the answer given by the Postmaster General is unsatisfactory, the Member of Parliament gives notice that he will bring the matter up again on the discussion of the Estimates of Expenditure. In the meantime he brings to bear, behind the scenes, what pressure he can command. And he often learns to appreciate the grim humor of the reply once given by a former Minister of Railways in Victoria, Australia, to a Victorian Royal Commission, to the query whether political influence was exercised in the administration of the State railways of Victoria. The reply had been: "I should like to know how you can have a politician without political influence?"

From "The British State Telegraphs," by Hugo R. Meyer, 1907, pp. 139-140:

Sir Lyon Playfair, who had been Chairman of the Royal Commission on the Civil Service, 1874 to 1876, and the author of the Playfair Reorganization of the Civil Service, 1876, testified as follows before the Royal Commission of 1888: "Unfortunately Members of Parliament yield to pressure a great deal too much in that direction, and they are certainly pressing the Exchequer to increase the wages and salaries of the employees of the Crown. * * * In a private establishment a man looks after his own interests, and if a person came to him and said: 'Now you must increase the salaries of these men by \$100 or \$250 all round,' he would say: 'You are an impertinent man, you have no business to interfere,' but you cannot say that to Members of Parliament, and there is continual pressure from Members of Parliament to augment the salaries of the civil servants."

Statement by D. A. Ross, member of the Manitoba Legislature. (Winnipeg, Manitoba, *Free Press*, November 6, 1913):

In the administration of all the public utilities of the province, the elevators, the telephones and every other enterprise, the Roblin government have contaminated the name of the province with political leprosy.

(*Foreign—Editorial*)

Winnipeg, Manitoba, *Free Press*, June 15, 1912:

It is matter of public knowledge that the telephone system has from the beginning been run as the main part of the Government's political machine, the Commission being subjected to constant interference and control, as in the case of the rate reductions on the eve of the last elections. That particular piece of Government control of the Commission is on public record, in the statement made by the chairman of the Commission, when under examination before the Public Accounts committee of the Legislature.

* * * * *

The hiring of Manitoba Government Telephone employees has been on political lines, the Commission being loaded up with brigades of political workers. In like manner the hiring of rigs and the purchase of supplies for the numerous telephone gangs throughout the Province have been conducted on political lines.

(*American—Official*)

From the report of W. Q. Gresham, Postmaster General of the United States, year 1883, p. 35:

The establishment and operation of a postal telegraph as a monopoly, or in competition with private companies, would, it is insisted, reduce rates which are now exorbitant and protect the public against the abuses and evils deemed to be inseparable from the service as it exists. In either event an enormous expense must be incurred. But without dwelling upon that consideration, it is clear that an efficient execution of either plan will necessarily involve the employment of a multitude of operators, messengers, mechanics, and laborers, and thus largely add to the patronage of the Government. An increase of that patronage beyond what is indispensable to the public service is to be deprecated and avoided, and it is one of the dangers which threaten the purity and duration of our institutions. In Europe the telegraph is under the control of the public authorities. With us, the administration is the

Government in action, and may, for the time being and for all practical purposes, be considered the Government itself. In seasons of political excitement, and, to some extent at other times, is there not ground for serious apprehension that the telegraph, under the exclusive control of the dominant party, might be abused to promote partisan purposes and perpetuate the power of the administration? But if it could be kept entirely free from such influence, I should hesitate to sanction a measure providing that the United States shall become the proprietor of telegraph lines, and operate them by its officers and agents.

Fitchburg, Mass., *Sentinel*, December 20, 1913:

Former Senator Bourne of Oregon is quoted in a Washington dispatch to the following effect:

"Senator Bourne states that he has not a dollar's interest in telephone or telegraph securities and that he is theoretically in favor of government ownership, though practically bitterly opposed to it.

"The ex-Senator's most startling deduction is that government ownership would result eventually in complete domination of the government by its own employees, who would vote themselves such hours and pay as they chose. Mr. Bourne submits the following figures:

	<i>Number</i>
1911 Government civil employees.....	410,332
1912 Telephone employees	221,000
1912 Telegraph employees	40,000
1911 Railway employees	1,669,000
1909 Electric employees	209,729
1904 Water transportation	188,000
1907 Express companies	79,284
Total	2,818,345

Under government ownership and operation there would soon be more than three million governmental employees," Mr. Bourne says. He continues: "Taking into consideration the fact that in the last ten presidential elections the president has been elected by a plurality varying from 7,000 plus to little over 2,500,000, the thought naturally arises that three million governmental employees could absolutely control the government under our political machinery, the tendency being more pay, less service in governmental employment, resulting in resistless efforts on the part of outside labor to secure government employment because less onerous and more remunerative, with accumulative dissatisfaction and irritation in all private enterprises."

Congressional Record, January 15, 1914, page 1753:

MR. MOON: * * * You are drifting rapidly to the exercise of central power. If you shall adopt the policy of the purchase of the telegraphs and telephones, you will have proceeded far to the federalization of power. You will have added thousands of offices to your Government. If you should go further and become the owners of the railroads, you would see a vast army of people who would be in control, a Federal menace to human rights and human liberty under a Constitution and laws in which the people have no part in selecting the officers to administer.

Washington, D. C., *Post*, December 11, 1913:

Senator Bankhead, of Alabama, chairman of the Senate committee on postoffices and post roads, is a pronounced opponent of government ownership.

"I recognize it is the tendency of the times, but it is a dangerous tendency," he said. "I don't want to see the government go into any business that can be transacted as well or better by individual enterprise."

From *The American Commonwealth*, (New Edition, 1910, Vol. II, Part 6, Chapter 106, Page 701), by James Bryce, British Ambassador to the United States:

It (*i. e.* the railroad) can hardly be taken over and worked by the National Government as are the railways of Switzerland and many of those in Germany and the Austro-Hungarian monarchy. Only

the most sanguine state socialist would propose to impose so terrible a strain on the virtue of American politicians, not to speak of the effect upon the constitutional balance between the States and the Federal Authority.

From remarks of Senator Joseph R. Bristow, of Kansas, before the United States Senate (*Congressional Record*, August 29, 1913, p. 4303) :

I wanted to suggest to the Senator, by his permission, that there is a wide difference between the running of a wholesale house and the administration of a government position. The Senator knows well that the man in control of a wholesale house is interested in the development of a business for profit. The man in charge of a political office in Georgia or Kansas or any place else is appointed there, if it is outside of the civil service, nine times out of ten because of political service that he has rendered to members of the party in power. The Commissioner of Internal Revenue is not free to go out and select the men who he thinks will administer the office better as is the man in charge of a business concern; he is bound by political obligations and ties. Now, we may theorize all we please, but that the Senator from Georgia knows to be a fact.

From Preliminary Report of the Joint Commission on Business Methods of the Post Office Department and Postal Service, February 10, 1908:

The appointments of postmasters, clerks in postoffices, and many other grades of the service are still largely affected by political influence, and it is to be feared that nominations made have often insufficient regard to the fitness of the applicant, to his previous experience, or to his familiarity with the routine of the postal service. Moreover, the frequent changes in the personnel of the service naturally operate adversely to its efficiency.

As compared with this condition, in well-administered commercial concerns promotion is by merit alone, no other influences being considered; and the different parts of the business are intrusted to heads thoroughly familiar with the whole routine work, who are held responsible for the work and are given practically a free hand in the selection, promotion, and retention of their subordinates.

Congressional Record, January 20, 1914, p. 2035:

MR. MURDOCK: * * * Now, I do not take much stock in the battle that has raged here between the two old parties about civil service. It is a resumption of the ancient and diverting game of the pot and the kettle. The Republicans say that the Democrats are not friendly to the merit system and the Democrats say that the Republicans are not friendly to the merit system. Both of them are right.

Congressional Record, January 19, 1914, p. 1972:

MR. McCUMBER: * * * Government ownership of railways, followed by Government ownership, as it must be, of other public utilities, means that the army of employees, organized as they always will be, will become the complete masters of the Government and the Government but the subservient tool to the interests of this great army. That army will be powerful enough to dictate every policy of Government. No man in any district in the United States would be strong enough to make his race as a Member of Congress if his ideas of the value of the wages of these Government employees did not correspond with their idea of the worth of their services. Whenever the Government puts itself in the position of owner of public utilities, it becomes the prey of an organized class of people, which will result in legislation against the mass of the unorganized people of the country.

Congressional Record, January 17, 1914, p. 1958:

MR. CAMPBELL: Suppose a Republican should have a higher grade than a Democrat for the same office, then what would you do?

MR. COX: Ah, I have had to go up against that ever since I have been in Congress, I am sorry to say, where Democrats in my district who had taken rural-route examinations and were several points the highest in the grade. I have gone down to the Post Office Department and tried to get them to

appoint the Democrat, but was told that some Republican referee in the State of Indiana, after both Republican United States Senators were defeated, had to be consulted, and their orders had to be obeyed; and the result was time and again that Democrats failed to get the position, although holding the highest grade.

From the Congressional Record, January 17, 1914, p. 1959:

MR. COX: * * * I mean to say this, for the third and last time that I am going to say it, that if I have any control or any voice in the selection of persons to fill positions in my district where a competitive examination has been held, that if a Democrat gets on the eligible register he is going to get the appointment.

Congressional Record, January 17, 1914, p. 1921:

MR. POST: I want to give the gentleman a concrete illustration to show that the merit system, as it has been administered heretofore, has been indeed prostituted to politics. In the city of Springfield, Ohio—and the gentleman is familiar with that city—we have a post office where there are 107 employees, and of that number only 6 are Democrats. I want to ask the gentleman if in the city of Springfield, in the application of the merit system, that office has not been prostituted to politics?

* * *

Right here, under the very nose of the Goddess of Liberty, right in front of the Capitol here, in the Congressional Library, you have 496 employees under the civil service, and less than 50 of them are Democrats. Have you not prostituted the merit system to politics in that case? Those people are there under a Republican administration.

Congressional Record, January 17, 1914, p. 1958:

MR. COX: * * * You have evolved and manufactured a new definition of the merit system which has been a political merit system. By a political pull it has found its way into the appointment of civil-service employees so that you have filled practically every department with Republican employees at home and abroad, the exceptions being indeed very few. You have paid no attention to merit, ability, intelligence, education. These things were wholly unknown to you in your appointments. You were governed solely and exclusively by the political rule of political expediency; you have applied this test faithfully; have never faltered or fallen by the side along this line. Out of 1,900 rural route carriers in the State of Indiana to-day I assert it to be a true fact, for I have investigated it, that less than 5 per cent. of this 1,900 rural route carriers are Democrats; the remainder were Republicans when appointed and Republicans to-day, and were it not for encumbering the Record I would place in it a volume of correspondence from 82 of the 92 counties in my State conclusively showing this condition to be true.

Congressional Record, January 17, 1914, p. 1950:

MR. STEENERSON: * * * The gentleman from Tennessee predicted dire results to the Government and the people if postal activities should be extended to telegraphs and telephones. I do not think we are ready for that. Certainly not as long as the spoils system in the Civil Service remains a debated issue.

From the Congressional Record, January 17, 1914, p. 1959:

MR. COX: * * * I have seen school-teachers in Indiana carrying a two-years' license—and this requires considerable of an education in Indiana before one can earn a two-years' license—I have seen them stand civil-service examinations for rural-route carriers side by side with ward politicians, men with practically no education whatever, and yet invariably the ward politician received the job.

Congressional Record, January 17, 1914, p. 1916:

MR. KAHN: * * * I am not surprised at the attitude of the gentlemen on the Democratic side of this House. The pressure for place is undoubtedly very great. Your Democratic constituents are demanding their reward. They want the jobs. They insist on their pound of flesh. Not alone are

the civil-service positions sought for, but various executive chiefs have demanded the resignation of postmasters, United States marshals, district attorneys, and other Federal employees, even though those officials still had two or three years to serve under their commissions. Happily some of these men have had the backbone and the courage peremptorily to refuse to surrender their commissions and to demand that their official conduct be investigated, to find out why they should be removed from office.

Congressional Record, January 17, 1914, p. 1908:

MR. RUCKER: * * * There are Democrats growing up in the country everywhere who are entitled under a Democratic administration to recognition; and if that means going back to the spoils system, then I am a spoilsman and I have no apology to make for it. (Applause.)

Congressional Record, January 17, 1914, p. 1906:

MR. BORLAND: * * * It has been my experience and observatiaon that not only was the postmaster named by some political officer in authority for political purposes and named without any special regard to his experience in that post-office business, but that same authority named also the assistant postmaster, and without consultation with the postmaster. And not only that, but it has frequently happened, I will say to my friend from Indiana (Mr. Barnhart), that the assistant postmaster was named from the faction of the party that did not happen to land the postmaster. I have known of cases—and I have no doubt my friend has, too—where they not only did not work in harmony, but where they did not trust each other personally, and I have always regarded it as a political blunder, if no worse, to put those men under political appointment.

Congressional Record, January 17, 1914, p. 1907:

MR. COOPER: Is it not true that under the policy or practice suggested by the question of the gentleman from Missouri (Mr. Rucker) assistant postmasters were appointed in this way: The Member of Congress wanted it understood that if John Smith was appointed postmaster it was done upon the express condition that John Brown should be the assistant postmaster, and that in many cases the postmaster had to agree to that before he could get the appointment, and in that way the Congressman fixed up a part of his own machine?

MR. RUCKER: That is exactly what I would do in every case, and I have no apology for it.

MR. BORLAND: It would be bad enough under the old conditions; but under the altered conditions, since the Post Office Department has become distinctly a business institution, there is no justification whatever for appointing these men for political purposes.

Congressional Record, January 17, 1914, p. 1956:

MR. COX: * * * On September 30, 1910, President Taft by an Executive order turned into the civil service approximately 2,400 assistant postmasters. Of these 2,400 assistant postmasters less than 500 of them had ever been subjected to or had ever stood a written competitive examination.

The remainder of them, 1,900 in number, had beyond doubt been appointed to their respective positions solely and exclusively because of their peculiar fitness politically.

Congressional Record, January 17, 1914, p. 1956:

MR. COX: * * * We have had in this country a "pretended" civil service for the last 30 years or more. I call it "pretended" civil service because that is all it is, all it ever was, and all it ever will be until the Civil Service Commission amends its rules and regulations in regard to certifying eligibles who have passed a civil-service examination. Talk to me about merit system all you please. We do not have merit system under civil service, never have had, and never will have until the rules and regulations of the commission are amended so as to make it strictly a merit system. The trouble with the civil-service system as it is administered to day, in my judgment, is that you give a leeway for any and all persons and parties to play "football" with it, and the Republican Party for 16 years has played "football" with it under the leeway.

Congressional Record, January 17, 1914, p. 1907:

MR. BORLAND: * * * I do not even believe those men are appointed in all cases for party service. I believe they are often appointed for service to some political officeholder who has the recommendation of their appointment.

MR. RUCKER: The gentleman ought not to go that far.

MR. BORLAND: I will go that far.

* * * * *

MR. BORLAND: I say that they are appointed not necessarily for party services, distinguished as such, nor because their views upon party questions are sound, and would appeal to the mass of the voters in their district if they were candidates for an elective office; but they are appointed because they have been politically useful to the man who recommends their appointment. Why, they may not have been serving the party. They may have been serving only a faction. They may have served only a political boss or leader. (Applause.) I object to either the postmaster or the assistant postmaster being made the official whip cracker over the heads of the men in the classified service, in the interest of either party, faction, or boss. (Applause.)

Congressional Record, January 17, 1914, p. 1957:

MR. SWITZER: How will you do in Indiana?

MR. COX: Exactly as you have played politics and "football" with the civil-service law for 16 years; I propose to turn the tables on you and do exactly as you have done; and, so far as your State is concerned, I take it that if a Democrat gets on the eligible register there will be enough warm Democratic blood in the members of this House from the State of Ohio to see to it that Democrats are appointed.

MR. SWITZER: Then you are not going according to the civil-service policy?

MR. COX: Yes; we are. We will be administering it exactly as the civil-service policy was administered by you and your party ever since you have been in power, and that is, see to it that every time a Democrat wins out in the written competitive examination, if he goes on the eligible register, see to it that he gets the position.

Congressional Record, January 17, 1914, pp. 1957-8:

MR. CRAMTON: And thereby you have admitted that your party is to-day playing football with the civil service?

MR. COX: This is exactly what you have done with the civil-service law for the last 16 years, and you know it to be true, and you cannot blame the Democratic Party for retaliating in self-defense.

MR. CRAMTON: Never mind your reason; but you admit you are doing it.

MR. COX: Whether you call it playing football or not, by your own example you have set the pace, and if we turn the trick on you, you should not blame us. I am a partisan; of course I am, and frankly state to you that if a Democrat gets on the eligible register for fourth-class postmaster he is going to get the appointment if I can aid him in so doing.

Congressional Record, January 17, 1914, p. 1958:

MR. COX: * * * Now, in response to queries from gentlemen on the Republican side, let me give you an instance as to how you have played football in the past with public offices. I had a Republican friend two years ago who wanted to be reappointed postmaster in my district, and, being a member of the Committee on the Post Office and Post Roads, I thought I might give him some little influence with Postmaster-General Hitchcock. I called upon the General, and was told by him that the little post office in a little town of about 2,500 was on the auction block and that if the postmaster could deliver the delegates to the district meeting that would select the delegates to attend the national convention he could receive the appointment. I informed my friend by letter, and he carried out my orders to a certain point, but failed to carry them out to the final conclusion, and the result was that he did not get that post office.

MR. SWITZER: What was the highest bid?

MR. COX: The bid was for the nomination of the Republican President in 1912.

A MEMBER: Who told you that?

MR. COX: Mr. Hitchcock.

Congressional Record, January 17, 1914, p. 1959:

MR. FESS: Do I understand that it does not matter what the regulation, the gentleman is opposed to civil service on the merit system?

MR. COX: No; I am opposed to the way in which you have administered it, or your party rather.

MR. FESS: Then why does the gentleman not endeavor to administer it differently?

MR. COX: Because partisans will administer it in a partisan way.

Congressional Record, January 17, 1914, p. 1958:

MR. COX: I am not quarreling with the Civil Service Commission. I imagine, so far as the examining of the papers are concerned, it is fair; but you have had an underground tunnel, a subterranean passage, whereby in some way or manner the Democrats in my part of the country have had no show on earth; and this became so obnoxious out in Indiana several years ago that bright, active, intelligent young men—Democrats—flatly refused to go forward and stand examinations.

Speech of Representative Moon, Chairman of the Committee on Post Offices and Post Roads, published in the *Congressional Record*, January 15, 1914, pp. 1750-51:

MR. MOON: * * * There are, I believe, 2,500 assistant postmasters in the United States. If they had been properly examined and placed under the civil service, would 98 per cent. of them have been Republicans? No; it could not have been so. And yet that is the practical fact. If those 43,000 men in the fourth-class offices had been examined, would 95 per cent. of them have been Republicans? Gentlemen, you know how easily it is done. You know the manner of examination.

* * * * *

I refer to these matters to show you that the examinations are never just what they ought to be. They may not always be fraudulent, but they are not examinations for the purpose of attaining an efficiency record. They are examinations controlled by favoritism and prejudices. What is the result of the examination? How is it that all of these Republicans get into office and no Democrats? The examination is certified to the department; the three men, in the opinion of the examiners, that made the best grade are placed upon the eligible list. There may have been one Republican and two Democrats who passed, or it may have been the opposite; but the Congressman, if a Republican from that district, is called upon to say which one of the three shall have the office, and, of course, gives it to a member of his party. I do not, from a partisan standpoint, blame him. But if the examination is held for the purpose of efficiency in the public service, there would be no question about the fact that, if it had been honest and fair, the man who obtained the highest grade would obtain the office.

Congressional Record, January 15, 1914, p. 1758:

MR. COPLEY: * * * In the spring of 1909 the Legislature of the State of Illinois was trying to elect a United States Senator, and at one time I counted in Springfield, the capital of that State, the city where the Legislature met, 168 Federal employees, all there for the purpose of trying to bring about the re-election of a man to whom they were under obligation for the generous salaries which they enjoyed and whose term expired forever March 4, 1909.

Many of these employees spent months in a vain effort to continue that policy, which had proven so obnoxious to the people of the State of Illinois.

From the 18th Annual Report of the Cook County, Illinois, Civil Service Commission, 1913:

During the preparation of the current budget the Finance Committee, at the urgent request of the heads of departments, increased the salaries of several of the "old and faithful employees," whose

services were described as "indispensable to the office." In February, 1913, when the Supreme Court declared the Civil Service Act, covering these positions, to be invalid, the department heads were powerless to save these "indispensable employees" who were swept away and their places taken by persons named from "outside" by the ward leaders. In one instance, an excellent teamster was named and forcibly appointed a stenographer. In another instance, a saloonkeeper, of undoubted parts in the liquor business, was made a clerk and his duties subsequently abolished to save the office books from ruin. In another case, a flat building janitor became a tax clerk. At least thirty of the politically appointed county employees are pluralists on the pay rolls of the state, city or park districts. Nine of them are members of the State Legislature.

Congressional Record, October 10, 1913, p. 6235:

MR. CLARK: * * * I am opposed to the whole civil-service propaganda. (Applause.) I am opposed to it because I believe it is hypocritical, insincere, and fraudulent in its every aspect, and, as my friend at my right suggests, damnable. Mr. Speaker, I am opposed to it because I believe with Andrew Jackson that to the victor belongs the spoils.

Extract from one of the speeches of Theodore Roosevelt (published in the biography of the latter by Jacob A. Riis):

We hear much of the question whether the government should take control of the telegraph lines and railways of the country. Before that question can be so much as discussed, it ought to be definitely settled that if the government takes control of either telegraph line or railway it must do it purely to manage it as a business undertaking and must manage it as a service wholly unconnected with politics. I should like to call the special attention of bodies interested in increasing the sphere of state action—interested in giving the state control more and more over railways, over telegraph lines and over other things of the sort—to the fact that the condition precedent upon success, is to establish an absolutely non-partisan system. When that point is once settled, we can discuss the advisability of doing what these gentlemen wish, but not before.

Report on Lewis Publishing Co. and Various Lewis Enterprises, by the House Committee on Expenditures in the Post Office Department (House Report No. 1601), March 1, 1913:

For nearly seven years the Government of the United States, through the Post Office Department and the Department of Justice, has been almost continuously prosecuting Mr. E. G. Lewis or the various enterprises with which he has been connected. * * * Every effort that the organized power of two great departments could exert has been used at enormous expense. As a result several large business concerns managed by Mr. Lewis have been ruined, among them the People's United States Bank, the Lewis Publishing Co., and the University Heights Realty and Development Co.; many hundreds of small investors have lost their savings; and the sad example has been shown the world of the powers of a great Government exerted successfully in an effort to ruin a single individual, and yet he has not been convicted of any violation of law.

* * *

WILLIAM A. ASHBROOK,
JOSHUA W. ALEXANDER,
WILLIAM C. REDFIELD,
WALTER I. MCCOY.

(*American—Editorial*)

Utica, N. Y., *Press*, December 22, 1913:

Government ownership of the telephone and telegraph lines has not worked out successfully where it has been tried. Here in this country it would increase the army of federal office holders, helping those who are in to stay in and then when a change came there would be a general ousting of trained and competent employees to make way for untried and incompetent people who had a political pull; and there is too much of that already without going into it more extensively.

Philadelphia, Pa., *Press*, December 22, 1913:

Patronage in Government appointments is inconsistent with efficiency and has been in the past one of the greatest of public evils. Civil service reform seeks to get rid of this evil and under our latest Administrations very largely succeeded. That reform is now discredited and the spoils system is again in partial operation. While this lasts certainly it will be no time to add another great army of employees to the public service. If the Government shall ever assume the new responsibilities it should be only when merit, skill and experience are secure in service independent of the outcome of popular election.

Burlington, Vt., *Free-Press*, December 20, 1913:

Would it be good for the country or for the employees themselves to be thrown into politics? Would it make the likelihood of a fair voice in elections greater to have this vast addition to the multitudes of federal office holders? Would it make the task of governing easier to have all the necessary additional work laid upon the National Government? The wheels of Government creak a little already with the burden we put upon them. If we make the Government try to act so entirely beyond its sphere, where are we to end? Will it not be demoralizing as well as expensive?

Torrington, Ct., *Register*, December 20, 1913:

It may also be said that the control of the wires by the Government would be a precursor of conditions such as exist in France where the labor organizations have the telegraph and telephone employees of the Government in their fellowship and thus have the Government in important respects under their thumb.

Ft. Wayne, Ind., *News*, December 19, 1913:

Let all public utilities be Government owned, and we find the country in control of an office holding class, a class that is able to operate the Government in its own interests and which does not hesitate to do so. Nothing is as thoroughly conducive to National decay as a Government dominated and controlled by an office-holding class. Of necessity this class becomes parasitical as it increases its power and at the same time its efficiency declines. Its sole object appears to be to obtain the maximum compensation for a minimum service, and to saddle it all upon the country like the old man of the sea.

Asbury Park, N. J., *Times*, December 19, 1913:

If the merit system were employed in the Government service in practice as it is in principle, it might be proper to supply an efficient army of employees to man this gigantic enterprise, but this is impossible. Conditions in the postal system are more nearly perfect than in any other under Government regulation, but even here the most desirable offices are filled by politicians.

Philadelphia, Pa., *Inquirer*, December 19, 1913:

Most of the telegraph offices of the country, though not the larger ones, are in charge of railway operators. If these were sworn into the Government service it would not be satisfactory to the railways, for the employees would naturally obey regulations of the Washington administration. There would arise a body of Federal officials enormous in its extent and larger in number than all in the service to-day. What these might effect as a political organization could not be predetermined, but we may be pretty sure that it would be an important factor.

New York *Telegraph*, December 13, 1913:

Another danger lies in the fact that a mighty army of civil service employees would be added to the Federal payroll. They would clamor for a higher wage and get it. And if the time ever should come when a majority of the voters of this country are beneficiaries of the public treasury, directly or indirectly, then the party in power will be self-perpetuating.

We have a fair example of what an addition to the civil service list means in the compact, unionized body of rural free delivery carriers. When the rural free delivery was first proposed in Congress by Tom Watson, he made the point that such mails would be delivered, in the main, by

farmer boys who would be willing to earn a little extra money, say, \$20.00 to \$25.00 a month, between spells at the plow.

There is not to-day, possibly, a rural free delivery carrier in the United States who would lower his dignity by standing for half an hour between the plow handles. He is a political leader in his community—a man of substance; and it may be remarked in passing that, almost to a man, the carriers opposed the institution of a parcel post, and, on the ground that it increases their work, they are now demanding more pay.

Telegraph operators and telephone operators are not structurally different from other folk. They would soon be demanding not what their services were worth, but what the dominant political party was willing to award in anticipation of political favors to come.

Chillicothe, Ohio, *Gazette*, December 12, 1913:

Chicago has had an alleged civil service system for years. Here is how the "Public Service" tells us it works:

Forty thousand persons are on the public payroll in Cook County, in Chicago. It is estimated that one out of every 20 male adults is a city or county employee. Many are not under civil service regulation. The Cook County Civil Service Commission in September made a report declaring that the total amount of salaries paid county employees not under civil service could be reduced 50 per cent., or \$1,072,000, provided ordinary efficiency supervision was used. The report described many instances of misfit political appointees.

From the address of Seth Low, President of the National Civic Federation, delivered at its Fourteenth Annual Meeting in New York City, on December 11, 1913:

* * * try to imagine, if you can, how the conflicting interests of different parts of the United States could be harmonized when the same government is responsible for railroad operation everywhere. The annual bill for the construction of public buildings for the Federal government has acquired the popular name of "pork-barrel"; because it is so universally recognized that appropriations for this purpose are made to gratify local sentiment and to promote the interests of individual Congressmen more than upon the merits of the matter, as determined by careful inquiry. What possibility is there that the administration of a system of National railroads would be, or could be, carried on under our democratic government in any other spirit? And in what possible way could the general interests of the people of the United States, in the matter of transportation, be less well served? Furthermore, the political consequences of centering such power in Washington are beyond calculation.

Scranton, Pa., *Scrantonian*, November 9, 1913:

In spite of civil service rules and other supposed safeguards, it is a fact that nearly every place holder is with the governing powers that be and the acquirement of public utilities on a National scale would prove a tremendous lever for political control by the party in power, if it cared to use it.

Saturday Evening *Post*, November 9, 1912:

In spite of civil service reform, the spoils system is pretty largely in control of the Federal Government, and virtually in complete control of many state governments. Naturally, heads of departments, who are the president's political advisers, change with a new administration; but many subordinates in the most responsible positions, who ought to stand or fall solely by the value of their work, are turned out for political reasons. Civil service rules protect the clerk in his humble job, but not in his ambition to reach the more responsible position, that is still the spoil of politics. Marshals, revenue officers and postmasters by the thousand are appointed because of their politics, or fail of reappointment on the same ground. The public is taught to regard Government office as a "plum," to be won by political service. The same rule obtains in state and city. Deputy treasurers, assistant auditors, game-wardens and oil inspectors get and hold their jobs through politics. Citizen Jones, of Oskamoosa, is congratulated and envied by his fellow townsmen upon having landed the fish inspectorship—because it pays more than he could earn in any other way by the same effort.

Saturday Evening Post, November 1, 1913:

The Government can operate telephones and telegraphs and railroads, for that matter -on business principles. It cannot operate them on spoils principles, except at a cost that would make the experiment a National calamity. The busy little gratters in both Houses of Congress, who distribute public offices as rewards for political service, fairly foreclose the Federal Government from some fields that it might enter successfully but for them. So long as the public service is burdened with this patronage graft, an extension of that service to new fields may well be viewed with alarm.

Fall River, Mass., *Herald*, February 12, 1913:

"I hope to receive by return mail your remittance of \$39. Please do not compel me to make another call." These words did not appear in a little note attached to an overdue tailor's bill nor are they in any way connected with a coal man's account; they are contained in a letter written to the postmaster at Beebe, Ark., by Gordon H. Campbell, treasurer of the Republican State committee during the presidential campaign of 1912, according to testimony brought out at the hearing in Washington. Mr. Camp did not accept the letter seriously. As a result he is no longer postmaster. He was compelled to resign under protest a few weeks ago because of suddenly discovered inefficiency, dereliction of duty and divers and sundry other things of which he has no knowledge. But if the plain truth were known it is more than probable that Mr. Camp was kicked out of office because he refused to contribute three per cent. of his annual salary to the political machine in his State.

Utica, N. Y., *Press*, July 25, 1912:

One of the most fruitful causes and occasions for complaint in political campaigns is that the politicians control all the office holders, their clerks and subordinates with great effort at caucuses and election time. The postmasters, for example, are selected by their prospective Congressman with a view to their political activity and ability, and they are expected to be exceedingly useful every two years when the member seeks renomination and re-election. That is true of every person on the public payroll, state, county and city. They make an organized army which is frequently very efficient. Suppose that all the employees of the express, telephone, telegraph and railroad companies were also on the public payroll, owing their positions in greater or less degree to the political favoritism of those in control of the government? That would multiply the army very materially, and the bread and butter question is an extremely strong argument. It would be practically impossible to oust from power the party which had this multitude of workers at its command. Whoever happened to be President of the United States under such a system could hold office indefinitely if he wished to, and perhaps somebody would.

Washington, D. C., *Post*, June 17, 1912:

Even drastic civil service rules cannot nullify the unwritten law that "to the victor belongs the spoils." So long as there are politicians, politics will play its part in the government service, and if that service is extended to public utilities, the administrations of the latter will be marred by political influence and favoritism.

Saturday Evening Post, May 18, 1912:

Somewhere round the post office you will find a formidable placard headed in blood-red type - Warning Against Activity in Politics by Federal Officers and Employees. The postmaster who hung it up was appointed on the recommendation of a senator or representative exactly because he had been active in politics. He knows very well that if his party, or his faction of his party, is defeated he will be turned out when his term expires, or before. He knows the post office offers him no permanent employment and that, whatever his record may be, he has not the slightest chance of advancement. The better positions and larger salaries will not go to those who have performed valuable service in the department, but to those who have performed valuable service in politics. So it is in other departments.

Extract from an article entitled "The Government and the Railroads," by Arthur T. Hadley, LL.D., President of Yale University, published in *Youth's Companion*, April 18, 1912:

Congress at each session invests a large amount of public money for the improvement of transportation facilities through the agency of a river and harbor bill. Is this money wisely invested, with a far-sighted view toward the public interest? No. Each member of Congress is more concerned with the immediate demands of his district than with the general needs of the country. Thousands of dollars are wasted in dredging streams that cannot ever be of any considerable use, while large and much-needed improvements are either postponed or carried on in a half-hearted and inefficient manner.

Editorial by Theodore Roosevelt, in *The Outlook*, April 6, 1912:

I have before me as I write the original of a letter sent to Mr. Figley, the postmaster at Hastings, Oklahoma, by Mr. James Harris, the Chairman of the Republican State Committee. The envelope is marked "personal," together with a memorandum to return it after five days to the Harris Brothers. The letter itself runs as follows:

Dear Sir:

I am in receipt of the following letter from the Department:

"The commission of Newton S. Figley, Postmaster at Hastings, Oklahoma, will expire February 28, 1912. When last inspected, this office did not appear to be in a satisfactory condition, and unless the postmaster can be relied upon to raise the service to a higher standard of efficiency it is believed that he should not be reappointed. The department will be pleased to receive as promptly as possible an expression of your views as to what action in this case will be for the best interests of the service.

"I hope you have your office in first-class condition and will continue to have it so.

"If you will bring in a delegation to the State and District Conventions instructed for Taft and Jim Harris, I will see that you are reappointed.

"With best wishes, I am,

Very truly,
(Signed) J. A. HARRIS, Chairman."

Mr. J. E. Dyche, of Oklahoma City, Oklahoma, who forwarded the letter to me, writes in an entirely friendly spirit about Mr. Harris, and says that Mr. Harris has admitted to him that the letter is genuine, and that, moreover, he knows Mr. Harris's signature.

Statement by James Dalrymple, Manager of the Glasgow Municipal Tramways, as published in the Boston, Mass., *Transcript*, January 31, 1906:

To put street railroads, gas works, telephone companies, etc., under municipal ownership would be to create a political machine in every large city that would be simply impregnable. The political machines are already strong enough with their control of policemen, firemen and other office holders.

If, in addition to this, they could control the thousands of men employed in the great public utility corporations, the political machines would have a power that could not be overthrown.

I came to this country a believer in public ownership. What I have seen here, and I have studied the situation carefully, makes me realize that private ownership under proper conditions is far best for the citizen of American cities.

New York *World*, December 26, 1913:

National ownership of telegraph and telephones would mean a governmental monopoly of communication. It is not enough to assume that in most cases and under most administrations the privacy of this business would be respected. We must take into account conditions that all experience shows may easily arise under exceptional men and extraordinary temptation.

Less than six years ago it was found that Roosevelt was spending more than \$7,000,000 a year on three thousand secret service agents, the whole system being in violation of the spirit of the law, and part of it in violation of the letter of the law. When Congress undertook to assert its constitutional powers over government expenditures, Mr. Roosevelt had the effrontery to declare in a message that

this action was taken because Congressmen themselves were afraid of being investigated by its spies. We have had in this country a benevolent McKinley with Mark Hanna behind him. We have had an easy-going Grant with Zach Chandler at his elbow. Who will say such characters and combinations will not appear again?

National monopoly of communication would be more than an instrument of oppression, it would be a mighty promoter of oppression. There would be an espionage in every suspected post office, spies at every suspected telegraph station and eaves droppers at every suspected telephone booth. All these instruments of communication would be in the power of politicians and political organizations.

Baltimore, Md., *Star*, December 18, 1913:

"Control over all means of communication of intelligence" would mean that every telephone and telegraph operator would be a Government employee and a potential Government spy. That administration which desired to muzzle the press might, under cover of a carefully prepared set of rules, beyond the immediate reach even of Congress, debar from the telegraph system press messages which proved displeasing to the powers that were on the simple plea that it was thus preventing the dissemination of "false" information.

Baltimore, Md., *American*, December 16, 1913:

It is seen at a glance that with the government in control of the telegraph, with the system of party government in force, the situation would be that of the telegraph lines under control of a party. In his speech to the suffragists Mr. Wilson laid down the principle that he as head of the nation is also the head of his party and governed by it. So that the President of the United States and his fellows of the administration, as good partisans, would be called upon to use or pervert the power of the telegraph for their own purposes. Hence they would suppress classes of newspaper dispatches upon the ground that they were libelous or otherwise subject to suppression. With a compliant attorney-general to refer the matter to, the way would be open for legal sanction. Thus there might be established the worst form of indirect censorship of the press through partisan control of the telegraph—not only might be, but would be. There are too many politicians as it is who fume and fret under the lash of publicity, and control of the chief medium of publicity would enable them to reduce the United States under forms of law, not ostensibly violating liberty, to a condition little better than that of Russia.

Washington, D. C., *Post*, February 14, 1913:

Another strong objection to government monopoly is that it breeds bureaucracy, the worst of paternalism's sins. The old world governmentally is in the clutch of that off-shoot of monarchism, and evidences are not lacking that democracy as practiced in America to-day is taking a strong slant in the same direction. Bureaucracy as we see it at work brushes Federal and State laws aside, sets up its own standards of administration, and tramples private rights ruthlessly. "Anything that is right is legal" is bureaucracy's motto, and its bill of rights is something to behold.

World's Work, December, 1906—article by T. B. Womack, formerly Judge of the Supreme Court of North Carolina:

It was a part of Governor Morehead's dream that North Carolina should have a great through system of railroads from mountains to seashore. To carry out this idea, a charter was obtained for a road from Goldsboro, the eastern terminus of the North Carolina Railroad, to the coast at Morehead City, a place named in honor of the Governor and then considered a great city of the future. The state took 12,000 of the 18,000 shares of stock, appointed a majority of the directors, and has had absolute control.

This road has now been operated by the state of North Carolina for nearly half a century, in war and peace, by Democrats, by Republicans, and by Fusionists—each with varying degrees of failure. The private stockholders for years have pleaded for a lease, or for anything to avoid a continuance of political mismanagement. During these many years no dividend has been earned, though

one or two presidents declared dividends of one or two per cent. per annum for political effect, when every cent should have been used in betterments. The stock value ranged from ten to twenty-five cents.

Finally, under the administration of Governor Aycock, it became known that the administration had determined to heed the cries of the private stockholders and the sound business judgment of the people of the state, and lease this last of the State's railroads. A great sigh of relief went up from mountains to sea. * * *

The effects of the lease were immediate. The first year of private management improved the road-bed and equipment to a point never before approached. The road is being extended and new connections made, and is run upon business, as opposed to political, methods.

From "Philosophy and Political Economy" (1893, Book 5, Chapter 2, page 372), by James Bonar:

There seems to be nothing in the theory of development to point us clearly to any centralization of all industrial organization in the State. It has yet to be shown in practice that beyond a certain limit, centralization would not be fatal to the spontaneous organization which has as yet been the main source of all industrial progress.

From "Railroad Transportation" (1885, page 49), by Arthur T. Hadley, LL.D., President of Yale University:

Once let the idea go forth that it is the duty of the state to take care of everybody, and everybody will cease to take care of himself.

REGULATION VS. OWNERSHIP

(Official)

From decision of the Supreme Court of the State of Washington (120 Pac. Rep. 861, at 869):

In its search for remedies and while seriously considering municipal, state, or government ownership, the public, by reference to the police power of the state, has almost unwittingly * * * solved the problem, and has by the application of fundamental as well as established relative propositions of law gained every advantage of ownership without assuming its burdens. * * * With the power to fix rates established, the process of elimination of unjust rates became a mere matter of detail based upon mathematical calculation; the only question giving any ground for debate being the basis of calculation.

* * * While rivalry may be promoted, monopoly in the sense of oppression is made impossible. The benefit of ownership is enjoyed, while its dangers—not the least of which is the political activities of great armies of public employees—are no longer a menace to those who, to avoid the hazards of public ownership, have unwittingly subscribed to the conditions prevailing before this and other states entered upon the policy of public control.

Extract from the Second Inaugural Message of Governor Adolph O. Eberhart to the Legislature of Minnesota, 1913:

In my opinion, public utilities must be either owned or controlled by the people. Where the control can be vested in a fair, impartial and competent authority, removed as far as possible from political influence, it is far superior to ownership. It has been found by experience that it is very difficult to keep municipally owned plants out of politics. As a general principle it is true that the state or the city should not go into any business which can be transacted as well by individuals.

From speech by Judge Lorin Cray, of Mankato, Minn., published in Public Service, Chicago, Ill., November, 1913, page 176:

After all, it occurs to the writer that while we yet remain ordinary human beings, uncontrolled by divine impulses, that the safest way to deal with public utilities is to foster private ownership and

adopt a system of careful regulation, as distinguished from actual control. The power exists, and the means are at hand, but we should be just.

Extract from a speech by George A. Lee, Chairman of the Public Service Commission of Washington, before the Educational club of the Tacoma Gas Company, Tacoma, Washington (Public Service, May, 1913, page 167):

Public service regulation as evidenced by the public service commission law of Washington, is the alternative of municipal control and ownership. Such regulation affords and secures all the alleged benefits and advantages of municipal ownership without the evils and disadvantages incident thereto. If such regulatory laws secure good service and reasonable rates and safe and efficient instrumentalities and facilities then, certainly, there can be no logical or conclusive argument in behalf of the surrender of such regulation for the experimental and dangerous plan of municipal ownership. In my judgment the passage of public service laws in many states within the last few years marks a new regime and gives the public that service and those rates to which they are entitled and gives the companies that rate of return which the constitution permits them and at the same time avoids the dangers and pitfalls of municipal regulation and municipal ownership.

Extract from speech of President Woodrow Wilson, at a meeting of the Federation of Democratic Clubs in Pennsylvania, held at Harrisburg, June 15, 1911. (Reprinted in the *Congressional Record*, August 14, 1912, page 11824):

The regulation of corporations is hardly less significant and central. We have made many experiments in this difficult matter, and some of them have been crude, and hurtful, but our thought is slowly clearing. We are beginning to see, for one thing, how public service corporations, at any rate, can be governed with great advantage to the public and without serious detriment to themselves, as undertakings of private capital. Experience is removing both prejudice and fear in this field, and it is likely that within the very near future we shall have settled down to some common, rational, and effective policy. The regulation of corporations of other sorts lies intimately connected with the general question which ramifies in a thousand directions, but the intricate threads of which we are slowly beginning to perceive constitute a decipherable pattern. Measures will here also frame themselves soberly enough as we think our way forward.

From President Taft's Special Message to Congress, February 22, 1912. (Reprinted in the *New York Times*, February 23, 1912):

This presents the question of government ownership of public utilities, which are now being conducted by private enterprise under franchises from the government. I believe that the true principle is that private enterprises should be permitted to carry on such public utilities under due regulation as to rates by proper authority, rather than that the government should itself conduct them. This principle, I favor, because I do not think it in accordance with the best public policy thus greatly to increase the body of public servants.

Extract from a speech delivered by ex-President Roosevelt on October 19, 1905, at Raleigh, N. C. (Mitchell, S. D., *Republican*, December 4, 1913):

I do not believe in government ownership of anything which can with propriety be left in private hands, and in particular I should most strenuously object to government ownership of railroads. But I believe with equal firmness that it is out of the question for the government not to exercise a supervisory and regulatory right over the railroads; for it is vital to the well being of the public that they should be managed in a spirit of fairness and justice toward all the public. Actual experience has shown that it is not possible to leave the railroads uncontrolled.

(Editorial)

Atlanta, Ga., *Constitution*, December 19, 1913:

It must be remembered that in this country we have now all the advantages and none of the disadvantages of government ownership. We have strict government regulation of prices and prac-

tices. We can enforce reasonable rates. And the Government has nothing whatever of the responsibility. This is not to reckon with the enormous sum in taxes paid to the states and nations. This would be lost under government ownership.

Springfield, Mass., *Republican*, December 18, 1913:

President Taft's Postmaster, Mr. Hitchcock, recommended government ownership of telegraph lines without including telephone lines. President Taft did not, however, endorse the idea—Mr. Wick-ersham, his attorney-general, no doubt voiced Mr. Taft's view in a letter to the Interstate Commerce Commission about a year ago, in which telegraph and telephone business was declared to be a natural monopoly, impossible to run on competitive lines, yet best run to "the reasonable satisfaction of the public under Government control and regulations with private ownership retained."

* * * * *

Government regulation of the telegraph and telephone companies has not been tried out; the Interstate Commerce Commission has had jurisdiction over them but for a very short time. Give this policy a trial first of all.

Philadelphia, Pa., *Public Ledger*, October 26, 1913:

President Wilson carefully weighed the matter of the two alternatives of private and Government regulation and of Government ownership and management, and he said: "Government regulation may in most cases suffice. Indeed, such are the difficulties in the way of establishing and maintaining careful business management on the part of the Government, that control ought to be preferred to direct administration in as many cases as possible—in every case in which control without administration can be made effectual."

Joliet, Ill., *Herald*, October 24, 1913:

Mere cheapness is a secondary consideration with the American people. We must have service even if we have to pay for it. We cannot expect Pullman seats at immigrant rates, but we are not going to drive a public ownership policy to the point where we shall have emigrant seats at Pullman prices.

Regulation, not confiscation, is the solution of the telegraph and telephone problem.

Brooklyn, N. Y., *Daily Eagle*, October 2, 1913:

Government ownership and operation of telegraph and telephone lines would be a venture for which no substantial justification could anywhere be found. Government control of these utilities in foreign countries, particularly in France, has not been a success. We do not need to repeat foreign experiments and foreign failures here. No substantial interest is asking for the change. Government, Federal and State, either now has or can obtain sufficient power of regulation over telegraph and telephone companies to protect the public against extortionate rates and inefficient service. That power already resides in the State of New York, and such protection is all the public requires. Power to regulate is all that Government should seek or expect in relation to these public utilities which are essentially enterprises for private operation not fields for wild experiments in State Socialism.

Extract from the Report to the Board of Trustees, New Seattle Chamber of Commerce, Seattle, Washington, submitted January 17, 1913, by the Executive Committee Bureau of Taxation:

The establishment of a municipal telephone system can be justified only upon the ground that it is necessary to insure good service and reasonable rates from the present system; a need which is at present filled by the Public Service Commission with which any citizen may lodge complaint.

Extract from the report of the Department on Regulation of Interstate and Municipal Utilities to the National Civic Federation, January, 1913:

Whatever may be the views of any individual regarding the desirability of having the State regulate the conduct of public utility enterprises, all must agree that the signs of the times point clearly in one of two directions—either to public ownership and operation, or to public regulation of private

ownership and operation. Competition, relied upon in the earlier days to protect supposed public interests, has failed completely. Competition in a public service business is war, and General Sherman's description of war applies as well to the public service industry as to the battlefield. The furnishing of a transportation, gas, water, electric, telephone or other public service is, and should be, naturally a monopoly. Unregulated monopoly in any field of endeavor is abhorrent to Anglo-Saxon people. While regulation of public utilities must be based on full recognition of the monopolistic character of the business, it is also true that recognition of monopoly invites public regulation or public ownership and operation. The Department believes not only that public regulation is preferable to public ownership and operation, but that public ownership and operation may be deferred only by reasonable public regulation.

From statement by Cardinal Gibbons, published in the *New York Evening Sun*, September 4, 1912:

I believe in the proper regulation of big business combinations and the broadminded at the head of these vast business enterprises would, I am sure, welcome fair and intelligent Government control. Such control should be of a nature to assure the people good service at prices which would protect the honest investor, it should prevent industrial warfare, should end political interference and should **encourage honest effort to serve the people with the utilities which they require.**

It must be remembered by those who so foolishly demand public and Government ownership that year by year the great public utility corporations are becoming more and more the property of the public.

For instance, five years ago, when Theodore N. Vail became President of the American Telephone Company, there were 18,000 stockholders; now there are over 50,000. This corporation serves 25,000,000 people daily. In 1901 the Baltimore & Ohio Railroad had 3,256 stockholders; now it has over 11,000. Ten years ago the Pennsylvania Railroad had 27,870 stockholders; now it has over 73,000. In the same period the Great Northern Railroad has increased its stockholders from 700 to 18,000; the New York Central from 9,872 to over 22,000. At the present time, it is stated by authorities, the owners of the railroads in the United States number not less than 2,000,000 people.

When there are added to these the owners of stocks and bonds in other public service corporations, it will be apparent to all fair men that public ownership of the proper kind is already here. Millions of our people have a direct and personal interest in the public serving business, and they are not going to be misled by any of the unfounded and theoretical beliefs of the Socialists of Government ownership.

From the "Principles of Economics," Vol. II, Book VII, Chapter 62, pp. 417-418, by F. W. Taussig, Professor of Political Economy at Harvard University, 1911:

For the present, however, and as far in the future as we can see, the main task before democracy in America is that of making more simple and smooth-working its political machinery; of securing plain honesty and routine efficiency in the accepted functions of government; and of regulating with some tolerable success the industries of the monopoly type. When good results in these comparatively simple problems have been achieved, it will be time to turn to the larger and more complex problem of public industry on a greatly extended scale.

From the "Principles of Economics," Vol. II, Book VII, Chapter 62, p. 413, by F. W. Taussig, Professor of Political Economy at Harvard University, 1911:

The clear alternative, then, and only alternative, to public management is public regulation. Ideally, regulation is less good, but practically it may be much better. Reasonably successful regulation is more easy to attain than reasonably successful public management.

Statement made by Charles E. Hughes, Justice of United States Supreme Court and ex-Governor of New York, in an address on January 31, 1908, in New York City:

I do not believe in governmental ownership of railroads. But regulation of interstate transpor-

tation is essential to protect the people from unjust discriminations and to secure safe, advantageous and impartial service, upon reasonable terms in accordance with the obligations of common carriers.

Extract from "The Problem of Monopoly," (1904, Chapter 6, Pages 115 and 120), by J. B. Clark, Professor of Political Economy at Columbia University:

The difference (*i. e.* in public benefits) between a thorough system of governmental regulation and a system of governmental ownership is by no means as wide as it appears; and what difference there is, is in favor of the regulated private ownership. Such ownership, if unregulated, has little to commend it. * * * We would better make a thorough test of the alternative plan and adjourn the question of public ownership till the plan of public control shall have been proved a failure.

* * * * *

That it is wise, before resorting to government ownership, to experiment with regulation more earnestly and judiciously than we have ever done, is sufficiently clear.

Extract from "Modern Industrialism," (1904, Part III, Chapter 4, Pages 271-272), by P. L. McVey, President of the University of North Dakota:

* * * It is, therefore, impossible to say "a priori" that a government shall own and operate its great industries. Each State must determine what things it can do best. The day of laissez faire has passed and regulation or ownership will be the method of conducting industry. Experience in trusting elaborate industrial functions to a democracy is not large, and where tried, not convincing in its results. A nation must first have the necessary civic capacity before it can successfully cope with the great industrial problems and even then the union of economy and enterprise is not assured. In the control, even of the ownership of monopolies, the State has a field of action to which it may well confine its efforts.

Extract from "American Railway Transportation," (1903, Part 4, Chapter 29, Page 427), by E. R. Johnson, Professor of Transportation and Commerce, University of Pennsylvania:

The regulation of railroads in the United States is apparently not to be accomplished by means of Government ownership. The commission system has been on trial in the States for thirty years and in the National Government for sixteen years, and while the results accomplished are not fully satisfactory, the system has not been a failure. The success of the Federal commission has been far less than it might have been had the demonstrated defects in the law of 1887 been corrected; but the wisest plan for the United States to follow, at least in the immediate future, is to improve the methods and agencies of regulation now being employed, rather than to attempt the enormous task of purchasing and operating two-fifths of the railway mileage of the world.

POST OFFICE

(Official)

From "Public Finance" (1899, Part II, Chapter 9, Pages 215-218), by W. M. Daniels, formerly of the Department of Political Economy, Princeton University, and recently appointed by President Wilson member of the Interstate Commerce Commission:

The post-office, upon investigation, proves to be unique in more ways than one. The risks involved in the ordinary processes of trade and manufactures are wholly absent. The system of transportation of which it avails itself is ready to its hand. "It has made use of existing and well-known agencies, where the only difficulty was one of organization," says Lord Farrer, who adds: "It is a merit of the undertaking, regarded as an official institution, that there is very little of that speculative element about it which is the life-blood of commercial activity." The capital which the state is required

to furnish is comparatively small in amount. * * * Add, finally, to the other peculiar characteristics of the post-office this, that an increase in its volume of business does not ordinarily involve a corresponding increase in its working expenses, and that the great postal reforms and improvements have as often been forced upon the department from outside as they have originated within its own official circle, and we are in a position to understand why, as Adam Smith says, it is "the only mercantile project which has been successfully managed by * * * every sort of government." Where other enterprises call for venturesome and speculative activity, the post office requires orderly routine, where the former demand much fixed capital, the post needs comparatively little; where in ordinary business transactions prices vary even for the same service, the post office has always one price for the same service; where other industrial enterprises, if mismanaged, long escape exposure and protest, the Argus-eyed public is daily inspecting the efficiency of the postal service; where the freight agent is puzzling over a complicated railway tariff, the postal clerk has the same simple regulations to guide him to-day and to-morrow.

From Table No. 4, "Comparison of Postal Revenues, Expenditures, Etc., Fiscal Years 1837 to 1912, Inclusive,"—Report of the Auditor for the Post Office Department, in Postmaster General's Report for Year Ending June 30, 1912 (Page 335). It should be noted, in connection with the figures given below, that the accounts include only those audited by the Auditor for the Post Office Department, and that the Auditor for the Treasury Department audits other expenses of the postal service, not included in the Postmaster General's Report. The total net deficit from the operation of the Post Office Department, 1837-1912, according to the figures shown below, is \$330,725,306.29.

<i>Fiscal Year.</i>	<i>Audited Postal Surplus.</i>	<i>Audited Postal Deficit.</i>	<i>Fiscal Year.</i>	<i>Audited Postal Surplus.</i>	<i>Audited Postal Deficit.</i>
1837*	\$ 813,384.58	.....	1875	.....	\$6,820,320.84
1838	\$ 191,928.75	1876	.....	4,647,253.04
1839	151,879.61	1877	.....	6,127,356.02
1840	174,713.72	1878	.....	4,905,029.28
1841	91,960.46	1879	.....	3,415,933.00
1842	1,124,213.30	1880	.....	3,221,953.48
1843	78,618.84	1881	.....	2,821,959.11
1844	61,340.12	1882	1,253,923.57	.....
1845	36,850.13	1883	2,181,352.57	.....
1846	633,318.22	1884	.....	3,907,057.29
1847	200,819.16	1885	.....	7,481,410.22
1848	174,751.47	.....	1886	.....	7,068,495.10
1849	227,512.56	.....	1887	.....	4,145,018.20
1850	286,739.94	.....	1888	.....	3,772,466.03
1851	131,894.62	.....	1889	.....	6,169,104.44
1852	1,923,022.85	1890	.....	5,400,764.44
1853	2,742,364.67	1891	.....	7,150,610.13
1854	2,352,699.98	1892	.....	6,110,975.97
1855	3,326,856.15	1893	.....	5,716,788.75
1856	3,487,046.52	1894	.....	9,977,515.32
1857	4,153,718.40	1895	.....	10,230,442.13
1858	5,234,843.70	1896	.....	8,444,201.31
1859	3,489,028.26	1897	.....	11,431,579.41
1860	10,652,538.66	1898	.....	9,054,551.75
1861	5,251,966.98	1899	.....	6,630,135.60
1862	2,826,144.35	1900	.....	5,410,358.10
1863	142,625.14	1901	.....	3,981,520.71
1864	404,814.72	1902	.....	2,961,169.91

*The office of Auditor for the Post Office Department was created by act of Congress approved July 2, 1846.

<i>Fiscal Year.</i>	<i>Audited Postal Surplus.</i>	<i>Audited Postal Deficit.</i>	<i>Fiscal Year.</i>	<i>Audited Postal Surplus.</i>	<i>Audited Postal Deficit.</i>
1865	917,249.50	.....	1903	.....	4,586,977.16
1866	933,851.10	1904	.....	8,812,769.17
1867	3,972,351.92	1905	.....	14,594,387.12
1868	6,545,348.20	1906	.....	10,542,941.76
1869	6,363,737.20	1907	.....	6,692,031.47
1870	5,097,854.11	1908	.....	16,910,278.99
1871	4,358,752.21	1909	.....	17,479,770.47
1872	4,749,094.11	1910	.....	5,881,481.95
1873	6,128,892.84	1911	219,118.12	.....
1874	5,757,908.07	1912	.....	1,785,523.10

From articles in the *North American Review*, June and July, 1902, on "Defects and Abuses in Our Postal System," by Henry A. Castle (then Auditor, United States Post Office Department) :

All public men and patriotic citizens should know more about the postal service, take a more lively interest in it, watch its development carefully, and guard its integrity with jealous zeal. It is an exceedingly vital part of our government polity—all the more vital because it is, strictly speaking, not a public function at all, but is more probably a private or corporate enterprise engrafted on the government's mechanism under pressure of an imperious necessity.

* * *

All the avoidable abuses are not actually existent. Many are only in embryo, but with well matured aspirations, already menacing. The irrepressible enthusiast who disclaims against government by injunction is loudest in advocating further innovations that would soon lead to government in the hands of a receiver. There is loud and influential demand for the postal telegraph, postal savings bank, and a postal life insurance bureau. There are wild, vague cries for the absorption of all railways under government ownership and Post Office Department management.

It may be true that the government could send out telegrams at reduced rates and pay expenses ; but little compact England has lost \$3,500,000 a year trying to do it, and is very weary of the experiment.

* . * * * * *

The fallacy of calling our postal system self-sustaining even if on the face of the books and on its present foundation it should fail to show a deficit at the close of some fiscal year, does not occur to casual observers, but it is recognized by all who study the subject. A railway company doing a business of nearly \$1,000,000,000 a year, which was required to pay no interest on bonds or dividends on stock would be a financial phenomenon. It is conceivable that the mail service might be so managed by a corporation as to yield satisfactory results and pay a small dividend, provided it performed no gratuitous services for the government as a condition of its existence. As now managed the Post Office Department has no "plant" whatever. All it owns in the way of personal property is mail bags, mail locks, letter boxes, carrier's bags and a few similar inconsequential items of equipment. Even in public buildings it is the tenant of the Treasury Department.

(Editorial)

Chicago, Ill., *Journal*, December 22, 1913:

Postmaster General Burleson spoke of government telegraphs and telephones as being fore-shadowed by the parcel post and postal savings bank. The reference is not happy. Only last week Mr. Burleson asked for an immediate emergency appropriation of \$1,000,000 to run the parcel post till next June. No one knows or can know for at least a year to come whether the parcel post will pay its own way or not. As for postal savings banks, the amount on deposit in these institutions on the latest date for which figures are available was \$35,392,622—about 40 cents per capita for the American people.

Washington, D. C., *Post*, December 20, 1913:

Replying to the objection that government monopoly in Europe has proved a failure financially in every such undertaking, Postmaster General Burleson remarks that our postal service is self-sustaining. But if we ask what made it pay expenses, whether by means of its own activities or by legislation which gave it a big advantage over private enterprise, the ground is cut from under the argument. An act of Congress sufficed to give the post office department the right to compete with the express companies, without consulting public opinion. But when it comes to binding the government to incur the enormous expense involved in the purchase of telephones and telegraphs and depleting all the State treasuries of their income now derived from taxes and franchises assessed against the companies owning the lines, some 15,000,000 voters may be on their feet demanding the last word in the transaction.

Rochester, N. Y., *Herald*, December 20, 1913:

The delivery of a letter is a comparatively simple undertaking. It may be trusted to men of no technical mechanical training or skill. It need be performed with only a moderate degree of celerity. It requires a comparatively small permanent investment in plant. It is, in a word, a simple function whose processes are easily understood by both the servant and the served; yet with all these elements contributing to the efficiency and ease of performance, there is continual complaint that the mail service does not satisfy expectations or needs. * * * This being true of the mail, how much more true would it be of the vastly more difficult and more urgent service of the telephone and telegraph under Government operation.

Boston News Bureau, December 20, 1913:

Now the notable circumstance is that so far no good reason is given why Uncle Sam should tackle the new job. Waiving contention as to legal power—which Mr. Mackay does contest—the only definite reason advanced by the Postmaster is that success in parcel post administration demonstrates federal capacity to run telephone and telegraph, since these also are means of communication, and their scope is so big that federal "unselfishness" is needed. Here is the fallacy of the undisturbed middle, as regards "means of communication," embracing letter, parcel, telegram, and telephone call as being identical in substance and treatment. As well say that canoe and dreadnought make equal demands on builder and user. Here is ignored the fundamental distinction of character.

The other difference of character as between federal conduct and private conduct of large enterprises should by now have impressed itself on the citizens' consciousness. Governmental costs average close to 50 per cent. above those of competing private enterprise wherever comparison is possible. The Aldrich assertion as to \$300,000,000 annual waste has since been little curtailed by efficiency commissions; the testimony of the Burleson and Lewis proposals would be to multiply it.

New York *Press*, December 19, 1913:

Mr. Don C. Seitz, a well trained and very successful manager of a large publishing concern, gave Congress a flat challenge only a few months ago. If Congress and the rest of the Government would confer upon him the necessary license, he offered, within a few days to form a syndicate to take over and operate, as a private enterprise, the whole post office system, under Government regulation and to give a vastly and more frequent (*sic*) postal service than is now given by the Government, and to lower postage rates for all classes of business, except, of course, the oceans and oceans of Congress' own "dead head" stuff.

New York *World*, December 19, 1913:

The World has extensive business relations with the post office department. It is one of the principal patrons of the telegraph companies and the telephone company. We can assure Mr. Burleson that if the telegraph and telephone service that we pay for was as incompetent and unsatisfactory as the postal service that we pay for, it would be very difficult indeed to print a great newspaper. We can

further assure him that it will be a sorry day for this country if intelligent American sentiment ever countenances the placing of all revenues and channels of written and spoken communications under the autocratic control of a partisan, political, post office department.

Buffalo, N. Y., *Evening News*, December 19, 1913:

It is only within the last year or so, or since the directorship of Postmaster-General Hitchcock that the government showed even a penny of profit. That is done by taking off a great mass of service that costs a great deal and yet is not charged as it should be, but it is due also to a miserable service in many places.

Buffalo has suffered not a little in that respect. Complaints have gone to Washington for a score of years without improvement to speak of. In fact, there have been years not very far behind us when citizens ceased complaining because it was hopeless. This does not imply fault in the local managers, but fault in the general policy of the department about equipment and facilities for handling the mails in the best way.

Mr. Burleson's suggestion that the government spend several hundreds of millions in acquiring the wire service of the country and take on its payroll some hundreds of thousands of operatives, comes at a time when the Postmaster-General in Great Britain, where the telegraph service is a public monopoly, is compelled to go to Parliament for an enormous subsidy in order to put his department on a living basis. It has become so run down under the endeavor to operate it so as to make a better showing than when it was in private hands.

Syracuse, N. Y., *Journal*, December 19, 1913:

The people of Syracuse don't want an agitation of the purchase of any other "transportation adjunct" to the postal service until the efficiency of the postal service has been raised; and they but echo the voice of protest of the entire country because the inequalities and inefficiencies in the service in this city are probably duplicated in every city in the United States.

Troy, N. Y., *Record*, December 19, 1913:

The plan of Postmaster-General Burleson for government ownership of the telegraph and telephone lines would receive more attention from the people if he first would perfect the government postal system. The room for improvement in that service is so great that he can find plenty of room for active and effective work without having the national wire lines added to his burdens. Besides, the people just now are not in a mood to have the telegraph and telephone offices organized as are those of the postal department, with non-working heads drawing large salaries merely for political reasons.

Springfield, Mass., *Morning Union*, December 19, 1913:

Meanwhile the difference between conducting a postal service over privately owned railroads and by means of privately owned cars and the purchase outright and operation, independently, of private interest, of the telephone and telegraph systems, is clearly apparent. Mr. Burleson says that other principal countries have government owned telegraph and telephone systems, but he neglected to state that not one of those countries has a system that approaches in efficiency the American systems.

Newburgh, N. Y., *Journal*, December 18, 1913:

Assuming that Mr. Burleson's figures are correct, however, the dividend which the post office department is alleged to have declared, the first, it is admitted, since 1883, would be regarded as a pretty poor demonstration of capacity in the business world. As for the parcel post, it is still an experiment and while it is a good institution and one that is appreciated and patronized by the public, the question arises whether or not it would be so amazingly profitable if the Government were compelled to pay the railroad what it is worth to carry parcels.

New York *World*, December 18, 1913:

Has the Government sufficiently proved its mastery even of railroad regulation, let alone

ownership and operation, to warrant its venture into these new fields? When it has done so and when it can offer an economical postal service which will attract and not drive away business, there will be time enough to talk about piling on to it other businesses.

Attleboro, Mass., *Sun*, December 16, 1913:

Experience in the navy yards where the Government pays \$2,000,000 more for a war ship than a private contractor charges, has been as illuminating as the conditions in the Government printing office where type is still set by hand because fewer would be employed and at less expense if there were used the typesetting machines which even the smallest private office owns. By charging off rent and building expenses to the Treasury Department, the post office apparently pays expenses and the parcel post has not yet existed long enough for a financial test.

New York *Times*, December 12, 1913:

"Mr. Burleson's comparison with the parcel post is also an absurdity," said a high authority in the telephone business. "To make the existing postal system available for package business, the department has only to add a clerk here and there and fix rates. The organization was ready. As for the fact that foreign Governments operate the wire systems, it should be remembered that the older nations were monarchies, with all powers in the hands of the ruler. They have gradually been working down to democracy. Here we started as a democracy with property and rights in the hands of the individuals, and it is proposed to vest these rights in the central government. Money cannot buy an organization, nor the brains that have created it. It is a thing of very slow growth, which can be killed over night.

Philadelphia, Pa., *Public Ledger*, October 3, 1913:

The Post Office Department has been managed with far less efficiency and economy than any of the great industrial companies or the railroads. Political expediency rather than a good service has for many years been the policy in that Government-owned institution.

Toledo, Ohio, *Blade*, October 7, 1913:

Before we have Government-run telegraph offices and Government-owned telephones, let us feel certain that the Government can do it without having to ask Congress to make up its losses on telegraph and telephone service as it has to ask it to cover the losses on the handling and delivery of the mails.

New York *Press*, October 4, 1913:

The Government already had all the necessary machinery in existence and in operation, for the continuance of the postal business. It had the offices, it had the expert managers and superintendents, it had the trained men, it had the established routes by railroad, water, horse and land. It already had virtually everything that was essential to the success of the postal business. It had it working out under the test of long experience. All it had to do, in fact, was to chuck the parcel post system into the post office system and let it go at that.

But it hasn't any telegraph service. Outside of military specialists it hasn't any expert that knows the fine points about the telegraph service. It hasn't any facilities for conducting the telegraph business. Unless it took over the whole telegraph business as it stands with all the persons now engaged in the telegraph business to help out the Government, it couldn't operate in that field the way it operated in the parcel post field.

From article entitled, "The Abuse of the Congressional Frank," by Robert D. Heintz, published in *Leslie's Weekly* (New York), January 30, 1913:

A member of Congress who is a candidate for re-election can have his political documents printed in the *Congressional Record*, and then as has been explained he can send them through the mails free of charge. He has to pay the actual cost of printing of the documents, but the envelopes

for mailing them with the congressional frank appropriately stamped on them, are furnished free, at public expense. However, since he does not have to pay any postage, which is by far the largest item, he reaches the voter with comparatively little expense to himself. The candidate who is opposing the man in office must pay full postage on all matter that he sends through the mails.

Washington, D. C., *Post*, December 11, 1913:

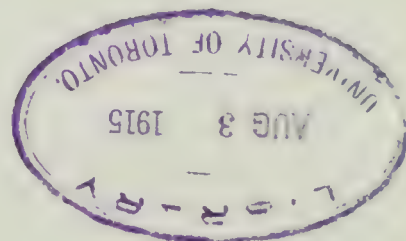
The one example of Government monopoly—the post office department—to which the promoters of the scheme can point with pride, was created to fill a want in a field that private enterprise had not gone into, a condition of affairs and the only condition, that gives warrant and consent to **Government ownership of utilities.**



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*American Telephone and Telegraph Co. Corp.
Brief of arguments about public ownership
Suppl. 4.*

**GOVERNMENTAL AND PRIVATE
TELEGRAPH AND TELEPHONE UTILITIES:
AN ANALYSIS**



SUPPLEMENT No. 9
FOR
BRIEF OF ARGUMENTS
AGAINST
PUBLIC OWNERSHIP

134840
14/1/15

**AMERICAN TELEPHONE AND TELEGRAPH COMPANY
COMMERCIAL ENGINEER'S OFFICE
NEW YORK**

AN ANALYSIS OF A SPEECH OF THE HON. D. J. LEWIS COMPARING GOVERNMENTAL AND PRIVATE TELEGRAPH AND TELEPHONE UTILITIES

The following discussion of certain portions of a speech of the Hon. D. J. Lewis in the House of Representatives, as reported in the "Congressional Record" of December 22nd, 1913, has been prepared to refute some of the statements of advocates of government ownership of telegraphs and telephones concerning the institutional efficiency, rates, and service development of the private telegraph and telephone enterprises in the United States, and to make available some significant facts concerning these phases of the government ownership question. However, as will be apparent, this paper is confined to a statistical treatment of the subject, no attempt being made to give other information of a discursive character, probably fully as significant, particularly with reference to the quality of service; and no social or economic theories have been debated.

Although this paper is not intended to *answer* Mr. Lewis' general discussions of the subject, it is intended to correct misinformation as to the efficiency, rates, and social development of telegraphs and telephones in the United States; and, for this reason, the important issues of fact have been squarely met. The analysis is, therefore, positive in character. It substantiates the following general conclusions which are directly contrary to those reached by Mr. Lewis:

1. The institutional efficiency of the American telegraph service, even on the basis of Mr. Lewis' statistical methods, is clearly superior to that of any government telegraph service.
2. Considering the differences in types of service, especially with reference to the normal differences in the lengths of telegraph hauls, the American telegraph rates are lower than those of the foreign governments even in terms of actual currency, and are probably much lower in terms of the value of money.
3. The development of the telegraph service in the United States is higher than in most foreign countries, and, in all cases where the development of the telegraph service in foreign countries is greater than that in the United States, the foreign development is clearly due to the fact that the development of local and short haul telephone business has been so low that a large part of the business normally transacted by telephone in the United States is, in those countries, transacted by telegraph.
4. The institutional efficiency of the American telephone service is higher than that of any government system. This is clearly proved by the facts, of which perhaps the most significant is that the very great majority of the government telephone exchanges are not operated more than a few hours, if at all, after sunset.

5. The exchange rates of the Bell System, in terms of currency, are actually lower than in several foreign countries under government operation; and, in terms of dollars equated on the basis of the value of money, are lower than in any foreign country under any government system without regard to the limited hours of service in the foreign exchanges.

6. The rates of the Bell System for toll telephone service are considerably lower than those of foreign governments, due to the fact that the foreign rates are particularly high for short distances where the bulk of the toll traffic both abroad and in the United States is transacted.

7. The development of toll telephone service in the United States is higher than in foreign countries, and is approached only in those countries where private operation has been an important factor in the development of the business.

8. Finally, the development of local service, both in terms of traffic per capita and of telephones per one hundred population, is very much greater than under government operation; and this is not due to differences in the character of American and foreign peoples, since the American development is equalled in Europe in those cases where private concerns have had a reasonable opportunity for the development of the utility.

C. I. BARNARD,

Commercial Engineer.

OUTLINE.

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ANALYSIS

(The small reference figures shown throughout this paper refer to a numbered list of sources and authorities given in Appendix H.)

Mr. Lewis' premises are:—

1. Telegraphs and telephones are not competitive, their prices do not tend to fluctuate, and they have the price characteristics of monopolies.
2. Without competition, the rule of private financiering under monopolies obtains—the higher the price secured, the higher the profit.
3. This being true, the motive of private monopoly is restricted to rendering only that degree of social service consistent with maintaining such prices.
4. Accordingly, the private conduct of a monopoly is not productive of its highest utilization or greatest social service.

No attempt is made herein to discuss these questions of economic theory. However, it may be noted that:

1. Mr. Lewis bases his contention, that telegraphs and telephones have the price characteristics of monopolies, upon Professor H. C. Adams' dictum that industries of "decreasing returns" have the price characteristics of monopolies, whereas Professor Adams, himself, has doubted that telegraphs and telephones are industries of "decreasing returns", as have other prominent economists.

2. Since Professor Adams expressed his views on "private financiering" and prices, the Interstate Commerce Commission and state regulating commissions have been created to counteract the tendency Professor Adams pointed out.

3. There is thus set up a controlling check upon any motive that might induce private monopoly to render "only that degree of social service consistent with maintaining such prices."

4. In this way is corrected any tendency of private monopoly to conduct its service on a basis "not productive of its highest utilization or greatest social service."

Without further discussion of the merits of these general statements, it is proposed to accept the test suggested by Mr. Lewis, and to "enter into a minute analysis of the facts which govern approach to business-like conclusions on this subject."

I. TELEGRAPHS

Mr. Lewis condemns privately owned telegraph systems as compared with government owned telegraph systems on the following assumptions: (A) that private operation of telegraphs is relatively inefficient; (B) that the prices of private telegraph service are relatively high; and (C) that the "social efficiency," adequacy, or development of private telegraph service is relatively low.

A. AS TO THE RELATIVE INEFFICIENCY OF PRIVATE TELEGRAPH OPERATION.

In general, Mr. Lewis' discussion of the assumed inefficiency of private telegraph operation consists of a development of the following main points: the United States Post Office is not inefficient; the private telegraph institutions are actually inefficient as indicated by comparative statistics; and the private telegraph organizations must be relatively inefficient because the advantages of economy of postal organization and methods are not obtainable under private management. These assumptions are discussed below in the order named.

The United States Post Office Is Not Inefficient.

Mr. Lewis assumes that the United States Post Office requires defense as to its efficiency in any discussion of government ownership, and, therefore, attempts to prove that it is efficient by an explanation of postal deficits, and by statistics of units of work performed per postal employee in the United States and in other countries. No attempt is made herein to prove that the United States Post Office is inefficient; but it will be clearly shown below that the data adduced by Mr. Lewis does not establish the defense which he thought necessary.

Mr. Lewis' defense of the United States Post Office deficits is:

1. Of the Post Office business, 29.24% produces only 5.19% of the revenue; and 1.85% of the business is franked. If all this business had paid first-class rates, the Post Office would have shown a surplus at all times since the Civil war, and a surplus of \$60,000,000 in 1912.
2. Deficits in the postal service are justified, as not contrary to the public interest.

With reference to the last contention, it may be observed that the fact of a deficit or surplus in the postal service is in itself proof neither of efficiency nor of inefficiency, since a surplus, according to Mr. Lewis' general argument, is possible with high prices and low efficiency; or a deficit is to be expected with improperly low prices and high efficiency. Indeed, deficits in the Post Office service may be justified; but it should be noted in this connection that a justification of deficits in the postal service does not apply to telephone or telegraph service, since in all countries the use of the latter services is restricted by the necessities of cost, whereas the postal service is universally used. As Mr. Lewis takes exception to the point of view that telephones and telegraphs are essentially of a more restricted character than the postal services, the following official expression of the opinion of the Australian postal administration is pertinent:—

"The telephone service affects a limited number of the population, and, more so than any other branch of the Department's business, may be said to partake of the nature of a commercial enterprise, so that its revenue should be sufficient to cover working expenses, including provision for depreciation, while returning a fair percentage on the capital invested."

However, since Mr. Lewis has attempted, despite the official reports of the postal service, to show that the Post Office in fact does produce a very considerable profit, it may be significant to show that his assertions are not warranted, for the following reasons:

- a. Franked and second-class matter would not move at first-class rates; and it is manifestly improper to assume that it would, in the calculation of financial results.¹⁰⁴
- b. Although Mr. Lewis has constructed some fictitious revenues not included in the official accounts, he has failed to include several items of actual expense not included in the Post Office accounts.
- c. It is believed that the government does not assume all the expense properly incurred in the Postal service, because of inadequate compensation for mail transportation.

The first reason is believed to be obvious and to require no discussion. The facts as to the incomplete official statements of Post Office expense, and as to compensation for the transportation of mails which are less obvious, are considered briefly below:

INCOMPLETE STATEMENTS OF POST OFFICE EXPENSE.

The expenses officially classified as Post Office expenses do not include large sums which are actually spent for Post Office business, classified under Post Office Department, Treasury Department, and the Department of Justice as parts of the Civil Establishment; and the official expense account of the Post Office does not include the charges on public buildings, which are under the jurisdiction of the Treasury Department, used wholly or partly for Post Office purposes. It is not possible to determine, from public reports at least, to what extent the Post Office profits, in statements of its financial results, from the omission of these expenses; but that their total is large is indicated by the following:

The amount spent for the Post Office Department, as a part of the *Civil Establishment*, exclusive of "Deficiency in the Postal Revenues," for the fiscal year 1912 was \$1,893,037.¹ This probably includes only expenses classified under the heading "Post Office Department" in the Civil Establishment appropriations; i. e., does not include expenses of office of Auditor for the Post Office, etc. However, an examination of the Appropriation Act of March 4th, 1913, indicates that the following appropriations of this character were made for the fiscal year July 1st, 1913, to June 30th, 1914:²—

POST OFFICE DEPARTMENT:

Salaries, wages, etc., offices of Postmaster General, Assistant Postmasters General, and subsidiary general offices, including office of Assistant Attorney General for the Post Office	\$1,750,500
Contingencies	162,850
Total	\$1,913,350

TREASURY DEPARTMENT:

Office of Auditor for the Post Office:	
Salaries	\$462,660
Piece Rates	166,960
Postal Savings System.....	49,300
Contingencies	87,700
	\$766,620
Office of the Treasurer:	766,620
Postal Savings System.....	18,000

DEPARTMENT OF JUSTICE:

Salary of Assistant Attorney General for Post Office	5,000
--	-------

Total Appropriations of Civil Establishment for Post Office Purposes \$2,702,970

The above does not include an appropriation for the Supervising Architect's Office, Treasury Department, of \$235,920. This covers the design of public buildings, purchase of sites, and supervision of public buildings and general maintenance thereof, largely for Post Office purposes.

All of the preceding appropriations are classified as appropriations for the general civil establishment. Appropriations for the Post Office Department, as an institution, are made by separate act.³

In addition to the expenses described above, there is a very heavy expense, not included in Post Office reports, in the nature of rent for the Post Office use of public buildings. It is not possible from the official reports to determine, even within approximate limits, how great this expense for Post Office purposes is, but the following will indicate that it is a large item:

On June 30th, 1912, the cost of public buildings used for Post Office purposes was:⁴

POST OFFICES (only):

Construction	\$38,585,869.04
Extensions and Alterations.....	2,034,217.19
Cost of Sites.....	18,371,652.19
Total	\$58,991,738.42

POST OFFICES, COURT HOUSES, CUSTOM HOUSES, ETC. (i. e., Joint Post

Office Buildings):

Construction	\$97,611,421.66
Extensions and Alterations.....	10,542,784.38
Cost of Sites.....	18,926,343.64
Total	\$127,080,549.68

The above does not include in the total an item reported as "Annual Repairs and Maintenance," which, although it is shown as a cumulative total and includes mechanical equipment and vaults, is probably current expenses to a large extent. The total of this "Annual Repairs and Maintenance" expense for the fiscal year 1912 was, for buildings used for post offices only, slightly more than \$230,000; and for buildings used as post offices, court houses, custom houses, etc., jointly, \$674,000, approximately. There was also spent, under the heading "General Expenses for Public Buildings," \$583,800, approximately, for post offices only; and \$184,400, approximately, for joint post office, court house, etc., buildings. The expenditures for "furniture and repairs for same" for post offices only was about \$374,800, and for joint post offices, custom houses, etc., \$417,300, approximately.⁵

The items of expense for public buildings given above are shown in detail, by public buildings, in the official reports. There are some others, not given in detail, which cannot be allocated to specific classes of public buildings; but it is apparent that they are very largely incurred on account of the Post Office. The more important of these items for the fiscal year 1912 were as follows:⁶

Salaries—Office of Supervising Architect.....	\$75,619.95
For General Inspector of Supplies.....	4,375.10
For Rent of Buildings.....	87,000.65
For Fuel, Lights, and Water.....	1,295,207.47
For Electrical Protection to Vaults.....	24,490.00
For Pay of Assistant Custodians and Janitors.....	2,125,828.06
	<hr/>
	\$3,613,187.23

The total expenditure for public buildings from July 1, 1911, to June 30, 1912, was. \$22,660,212.85⁶

COMPENSATION FOR MAIL TRANSPORTATION.

The compensation to railroads for transportation of mails is believed to be inadequate for the following reasons:

Compensation to railroads has increased in very much smaller proportion than other Post Office expenses in recent years. (See Appendix A.)

Compensation to railroads for handling business of the express companies is greater for similar business than for handling mails. (See Appendix A.)

The almost universal complaints of railroad managers addressed to the public have caused Congress and the Post Office Department to institute an investigation in the matter.⁷

Compensation for transporting mails by rail is less, proportionately, in the United States than in Great Britain, as shown by the following statistics:

PAYMENT ON ACCOUNT OF STEAM RAILROAD MAIL SERVICE

U. S. POST OFFICE, YEAR ENDING JUNE 30, 1913.

Mail Transportation*.....	\$47,393,266
Railway Post Office Car Service*.....	4,566,212
Total.....	<hr/>
	\$51,959,478
Per Cent. of Total Reported (by Postmaster General) Expense.....	19.8

PAYMENTS ON ACCOUNT OF STEAM RAILROAD MAIL SERVICE

BRITISH POST OFFICE, YEAR ENDING MARCH 31, 1913.

Conveyance of Mails (not including Parcels Post)**.....	\$9,324,408
Railway Share of Rail-borne Parcels (55%) ¹⁰	5,635,217
Total.....	<hr/>
	\$14,959,625
Total Expenses†.....	\$62,439,777
Per Cent. of Total Expenses.....	23.9

It should be noted that parcel post payments for railway transportation amount to about 38% of the total mail (inland) transportation expense in Great Britain; whereas in the United States, up to the present, additional compensation to the railways on account of parcels post business cannot exceed 5% increase over the contract payments based on conditions applying to the transportation of ordinary mail.¹¹

*This item is officially described as "conveyance" of mails. It covers mail transportation on railroads, not including steamship service, but an examination of the reports either of the Postmaster General or of the Board of Trade as to railway revenues does not determine whether or not other mail conveyance is included.

†This total does not cover telephones and telegraphs. It includes about \$1,300,000⁹ for the purchase of sites and the erection of buildings—an item not included as Post Office expense in the United States. If this amount be deducted from the total given above, the percentage of railway payments to total payments is 24.4.

MR. LEWIS' DEFENSE OF THE EFFICIENCY OF THE UNITED STATES POSTAL PERSONNEL.

Mr. Lewis quotes the following statistics to show that the efficiency of the postal personnel in the United States is increasing, with the result that the cost of service per unit is decreasing; and to show that the efficiency of the United States postal personnel is high as compared with that of other countries:

MR. LEWIS' TABLE NO. 1.*

UNITED STATES

Year	Number of mail pieces	Number of mail pieces of foreign matter	Number of mail pieces per annum	Cost per mail piece	Cost per unit of Rural Delivery
1886..	122,698	3,474,000,000	28,313	1.44	...
1887..	127,288	3,495,100,000	27,458	1.49	...
1888..	134,112	3,576,100,000	26,665	1.55	...
1889..	129,295	3,860,200,000	29,855	1.58	...
1890..	153,857	4,005,408,206	26,033	1.61	...
1891..	162,855	4,369,900,352	26,833	1.63	...
1892..	171,780	4,776,575,076	27,806	1.57	...
1893..	178,018	5,021,841,056	28,209	1.57	...
1894..	183,916	4,919,090,000	26,746	1.67	...
1895..	189,671	5,134,281,200	27,069	1.64	...
1896..	194,533	5,693,719,192	29,268	1.54	...
1897..	199,846	5,781,002,143	28,927	1.57	1.57
1898..	208,873	6,214,447,000	29,752	1.50	1.50
1899..	215,904	6,576,310,000	30,459	1.47	1.47
1900..	224,029	7,124,900,202	31,826	1.44	1.43
1901..	235,327	7,424,390,329	31,549	1.48	1.46
1902..	246,524	8,085,446,858	32,797	1.47	1.42
1903..	256,673	8,887,467,048	34,625	1.49	1.40
1904..	268,685	9,502,459,535	35,366	1.53	1.40
1905..	272,034	10,187,505,889	37,449	1.56	1.36
1906..	278,658	11,361,090,610	40,770	1.49	1.28
1907..	278,010	12,255,666,367	44,083	1.48	1.26
1908..	283,481	13,173,340,329	46,469	1.50	1.25
1909..	288,036	14,004,577,271	48,620	1.49	1.25
1910..	291,320	14,850,102,559	50,975	1.47	1.22
1911..	291,113	16,900,552,138	58,054	1.33	1.12
1912..	290,701	17,588,658,941	60,504	1.34	1.10

MR. LEWIS' TABLE NO. 2.*

Number of postal-service units per postal employee.

Country	Units.	Rank.
Belgium	85,819	1
United States	60,651	2
Netherlands	53,621	3
Italy	42,947	4
Luxemburg	40,321	5
Denmark	38,930	6
Switzerland	37,562	7
Germany	37,236	8
Sweden	35,837	9
France	33,697	10
Norway	32,414	11
Austria	30,528	12
New Zealand	28,696	13
Great Britain	26,056	14
Hungary	23,025	15
Japan	21,820	16

It appears from these statistics that the United States ranks second in postal efficiency. We have no means of checking these statistics completely. We dispute their accuracy, however, and maintain that they are not significant for the following reasons:

1. Mr. Lewis' statistics as to the number of postal employees in the United States do not agree with official statistics. The Postmaster General, in his report dated December 1, 1909, stated (page 1) that there were then about 325,000 employees in the service, or about 35,000 more than shown by Mr. Lewis for 1912. This error would make a difference of about 6,000 pieces of mail per employee per annum.

2. Accurate statistics of employees engaged in the postal service cannot be obtained for most foreign countries. We are advised by the Post Office Department, Great Britain, that: "The staff is common to the postal, telegraph, and telephone service and no separate figures can be given."¹⁸ Again, even in the case of Luxemburg, which is very small, it is officially stated that "the number of employees in each service cannot be shown separately."¹⁹ Mr. Lewis himself in his speech of January 16, 1914, has admitted that this condition exists. He says:

*Tables taken from Mr. Lewis' speech are numbered in the order in which they are here analyzed to facilitate reference.

"* * * If the gentleman refers to the telegraph, I wish to suggest that its personnel is not separated from the postal personnel (i. e., in England); their efforts are devoted to both services." (Mr. Madden): "I understood the gentleman was talking about telephone service." (Mr. Lewis): "And the telephone service cannot be truly segregated either."

3. The postal employee cannot serve as a unit in determining the efficiency of the postal personnel. It would be necessary to equate all employees to a "standard" employee for each of the countries used by Mr. Lewis. It is doubtful whether efficiency statistics even on this basis would be of any significance. As an instance of the inaccuracy of Mr. Lewis' statistics in this respect, it may be noted that, in Great Britain, of the total employees of the Postal Establishment (240,134), 122,018, or more than half, are known as "unestablished officers";²² i. e., their employment is largely auxiliary, temporary, or intermittent.²⁴ Of course, the inclusion of such employees in Mr. Lewis' statistics would greatly decrease the apparent efficiency of the British personnel.

4. The above relates to the Tables Nos. 1 and 2 as "comparisons of our postal accomplishments with that of other nations." As a matter of fact, Mr. Lewis has not actually attempted to show the purely postal efficiency in the various foreign countries; for he states, in connection with some of these statistics, as quoted with reference to telephone efficiency:²³

"The column for postal efficiency is inserted to show the performance of the postal personnel. For this purpose the postal service unit is treated as the average mail piece, and the telegram as equal in service to ten mail pieces, while the local call is rated as equal to one-half mail piece, or unit, and the interurban as equal to two mail pieces."

Hence, Mr. Lewis' comparison of postal efficiency is of no significance, except on the assumption that his equation of telegraph and telephone traffic in terms of the postal unit is correct. Not only is such an equation impossible as to any given country, but it cannot be assumed that the average mail piece in any country is equal, even roughly, to the average mail piece in any other country, owing to wide differences in the average length of mail haul, in the conditions as to urban and rural delivery, in the proportions of foreign mail (each piece of which would be counted in each country in which it is handled, although only a part of the operations connected with receipt and delivery of such mail matter is performed in one country), etc.

From the above discussion it will be apparent that Mr. Lewis has not demonstrated the efficiency of the United States Post Office, because he has not proved that the Post Office returns a profit even if this were significant; because his statistics of postal employees are in error as to the United States and as to other countries; and because his statistics of postal performance rest upon gratuitous assumptions as to units of postal work. Much of this discussion is not significant as to the general subject of this paper, but has been necessary because Mr. Lewis has reached his conclusion as to the superior efficiency of public over private operation by contrasting the assumed high postal efficiency in the United States with the assumed low efficiency of the telegraph and telephone organizations in the United States, as compared with that in foreign countries. If both these assumptions were justified by the facts, then admittedly a strong presumption in favor of government ownership, so far as "institutional efficiency" is involved, would be established. The first of these assumptions, however, has at least not been substantiated by any evidence; it will be proven in the following pages that the second is untenable.

Mr. Lewis' Statistical Proof of the Inefficiency of Private Telegraph Organizations.

Mr. Lewis submits the following statistics to prove the relative inefficiency of private telegraph organizations in the United States:

MR. LEWIS' TABLE NO. 3.

<i>Traffic density and efficiency</i>				
Country.	Telegrams per employee.		Telegrams per operative office.	
	Per annum.	Per day.	Per annum.	Per day.
New Zealand	3,700	10.1	4,380	12
United States	3,487	9.5	14,332	39.3
Norway	3,115	8.7	2,097	6
Belgium	3,063	4.4	5,451	15
Sweden	2,370	8.6	1,495	4
Netherlands	1,607	6.6	4,774	13
Switzerland	1,596	4.4	2,454	7

That this comparison is unsound and does not substantiate Mr. Lewis' conclusions as to the efficiency of telegraph personnel will be apparent from the following:

1. The table is based on data which does not include all telegraph employees in foreign countries. Both in the United States and in other countries many postal, telegraph, and telephone employees are engaged in the work of more than one service, including, in many instances, railroad service. As stated above, no definite classification of employees in the postal services of foreign countries exists. Even in the official annual reports no attempt is made to allocate "joint" employees, i. e., such employees as are not engaged exclusively in telegraph duties.

For instance, the annual reports of the Telegraph Administration of Belgium do not distinguish between the number of telegraph employees and the number of telephone employees; their reports do show, however, that the number of employees in the Railroad, Postal, and Bridges and Highways Administrations, who have telegraph or telephone duties in addition to other duties, is greater than the total number of employees of the Telegraph (including Telephone) Administration.²⁵ These employees have been ignored in Mr. Lewis' statistics. Telegraph messengers, of which there are about 3,000, a very large proportion of the total employees, also do not appear on the payroll of the Telegraph Administration.^{26, 20}

In the case of Sweden, a letter from the Telegraph Administration, dated February 18, 1913, states that an accurate distinction between telegraph employees and telephone employees "does not exist." The Administration states, however, that on December 31, 1911, there were at least 3,422 telegraph employees.²⁷ This is 88% more than the number of telegraph employees quoted for the same date in the source (Journal Telegraphique) from which Mr. Lewis derives his data.²⁸

In the case of The Netherlands, Mr. Lewis arbitrarily excludes 2,078 joint postal-telegraph employees in calculating the telegraph efficiency. If these joint employees had been included in the total of telegraph employees, the number of telegrams per annum per employee in The Netherlands would have been less by about 34% than that shown by Mr. Lewis.²⁹

2. If the method of comparison used by Mr. Lewis were sound, there ought to be no great disparity between the rank of the postal and telegraph efficiencies of the countries named. The countries rank, on the basis of Mr. Lewis' statistics, as follows:

RANK AS TO EFFICIENCY OF PERSONNEL.

Country.	Mail.	Telegraph.
New Zealand	7	1
Belgium	1	4
Netherlands	3	6
Norway	6	3
Sweden	5	5
Switzerland	4	7
United States	2	2

It appears that New Zealand ranks first in one case and last in the other—an inconsistency undoubtedly due to errors in the classification of joint employees.

3. If the efficiency of telegraph organizations in the United States were not exceedingly high, it could not rank second even on the basis of Mr. Lewis' statistics, since the relatively very long telegraph lines in the United States necessitate proportionately larger number of plant employees and a greater amount of relay operating work. That the length of hauls has a material bearing on the number of employees required to maintain the telegraph plant, is, of course, obvious; and it may be noted in passing that length of lines is an important factor to which the Australian Administration reverts in explaining high telegraph deficits.¹⁷

However, even on the basis of these statistics, the efficiency of the private telegraph organizations appears very high; so that Mr. Lewis is obliged to insert the second column in his table in an attempt to show that the apparent high efficiency of the American telegraph organizations is due to the lack of a sufficient number of telegraph offices in the United States.

4. Despite the errors of fact concerning the efficiency of foreign telegraph systems—errors which have been most unfavorable to the private systems—Mr. Lewis find that the American systems are highly efficient, ranking second on his own statistics; and probably ranking first, if the long lines in the United States are taken into consideration. It is, therefore, evident that Mr. Lewis' case as to the efficiency of the private systems entirely fails, unless he accounts

for these facts in some way that discounts the significance of his own statistics. This he has recognized; and has, in consequence, prepared the statistics of telegrams per operative office in Table 3. If these statistics are correct, they at most lend some slight support to the contention that the efficiency of the private organizations may not be high; if they are incorrect, the conclusion is inevitable that Mr. Lewis has himself, in effect, admitted the high efficiency of the American telegraph organizations.

The statistics as to telegrams per office, if correct, serve Mr. Lewis' purpose admirably; for it must be admitted that if high operative efficiency is secured by a restriction of telegraph facilities to those points where volume of business assures economical adjustment of forces to traffic, the efficiency so obtained is not real. If, on the other hand, apparent high efficiency is secured under conditions of small loads per office, the facts serve to emphasize the efficiency of the organization. The only question involved in Mr. Lewis' statistics of telegrams per office, therefore, concerns their accuracy.

A study of Mr. Lewis' statistics as to telegrams per office shows that they are in error because, in the case of foreign countries, *all kinds of telegraph offices are included*, whereas, in the case of the United States, *all railroad and other offices not directly operated by the telegraph companies are excluded*. For example, in the case of Sweden, Mr. Lewis has used statistics of telegraph offices which include 1,729 railroad (1,246 private company) telegraph offices, or 60% of the total.³³ Similarly, for New Zealand, Mr. Lewis has used the figure for telegraph offices given in the *Journal Telegraphique* (1963)³⁴, but the Annual Report of the New Zealand Administration for the same year (1910) states: "Of these, 300 were telegraph offices and 1,663 were telephone offices."³⁵ Probably this means that only 300 were Morse operated offices³⁶ (the only kind used by Mr. Lewis for the United States). (See page 23 for further confirmation.)

It will be noted from these facts that if railroad and telephone operated offices in foreign countries are included as telegraph offices, similar offices must be included for the United States in any such comparison if it is to be either fair or accurate. Mr. Lewis' error is shown by the following statistics as to the Western Union Telegraph Company:—

Total number of originating paid messages per annum, about	90,000,000
Number of telegraph offices (receiving written telegrams) of all kinds, October 31, 1913	36,491
Telegrams per annum per office.....	2,466
Telegrams per day per office.....	6.75

From these facts it will be evident that the number of telegrams per office in the United States is less than in New Zealand, Belgium, The Netherlands and Switzerland, four of the six foreign countries named by Mr. Lewis. Hence, it is clear that the operative efficiency of the American systems conceded by Mr. Lewis is not to be discounted because of a restriction of facilities; and that the facts serve rather to accentuate the high rank of the American systems.

Not only is the operative efficiency of the American telegraph systems exceedingly high under the adverse conditions described above, but this is true *even though the hours of telegraph office operation are much longer in the United States than in any other country*. This is evident from the following facts as to the length of hours of telegraph offices in the countries named by Mr. Lewis:*

	Per Cent. of Total Telegraph Offices—		
	Open Permanently.	Complete or Prolonged Day Service.	Limited Day Service.
New Zealand (1910) ³⁷	0.0	95%	5%
Norway (1912) ³⁸	0.3	10	89.7
Belgium (1912) ³⁹	1.0	26	73.0
Sweden (1912) ⁴⁰	1.6	43	55.4
Netherlands (1912) ⁴¹	0.7	16.9	82.4
Switzerland (1912) ⁴²	0.3	19.4	80.3
Western Union Telegraph Company:*			
Open day and night.....			19.3%
Open until midnight or later.....			5.9%
Open until from 10 p. m. to midnight.....			6.4%
Total open later than 10 p. m.....			31.6%

*See also discussion with reference to government telegraph facilities, pages 22-25, following.

The term "Complete or Prolonged Day Service" is not defined in the Journal Telegraphique, from which the above statistics for foreign countries are derived; but, in general, "Complete or Prolonged Day Service" does not extend beyond 10 o'clock p. m. Most of the Telegraph Administrations do not give, in their annual reports, statistics as to the hours of service of their telegraph offices. In the case of Switzerland, however, full information of this character is given, and will serve to indicate the significance of the comparison shown above.

TELEGRAPH OFFICES—SWITZERLAND, 1912.⁴¹

Number of Offices with Continuous Service.....	6
Number of Offices Open until 10 p. m.....	17
Number of Offices Open until 9 p. m.....	359
Number of Offices Open from 7 or 8 a. m. until 12 m., and from 1 p. m. to 8.30 p. m.....	84
Number of Offices Open from 7 or 8 a. m. until 12 m., and from 2 p. m. to 6. p. m., and from 8 p. m. to 8.30 p. m.....	1,908
Total	2,374

Mr. Lewis' Assumptions as to Economy in Telegraph Operation Under Post Office Management.

Mr. Lewis considers the private operation of telegraphs inefficient not only on the basis of the erroneous statistics in Tables 1, 2, and 3, which have been analyzed above, but also on the assumptions that many detailed operations could be eliminated under government management largely by the use of stamps; and that many expenses of organization, like supervision, engineering, rents, etc., could be reduced or eliminated by consolidation with the Post Office. Mr. Lewis' error in respect to the possibility of eliminating operations by the use of stamps is analyzed in detail in Appendix B. However, it should be noted that there is no reason why private stamps could not be used by the telegraph companies if this were a desirable practice, but the telegraph service would be less satisfactory with stamp payments because:

1. Charge accounts, which are a great convenience to many business houses, would be eliminated.
2. "Collect" messages (not permitted by governments⁴²) would be obviously awkward with stamp payments. Of the business of the Western Union Company, about 8,000,000 messages per annum are sent "collect."⁴³
3. Stamps cannot be placed on telegrams sent by telephone, and a charge account would be necessary in such cases.
4. Even under government ownership, stamps or cash are equally acceptable; and frequently *cash only* is accepted (particularly at railroad stations in Germany).⁴²

In support of his general assumption as to the elimination of operations by the use of stamps, Mr. Lewis says:

The same phenomenon of relative rather than actual waste or inefficiency appears in the handling of the parcel by the express company when compared with the Postal Department.

LIST OF EXPRESS PROCESSES.

THE EXPRESS COMPANY.

1. Ascertains the rate to be paid.
2. Makes out waybill.
3. Copies waybill into record of shipments "forwarded."
4. Copies same into record of shipments "received."
5. Makes statement of "shipments sent" to auditor.
6. Makes same of shipments "received."
7. Auditor checks waybills against record of "sending" agent.
8. Auditor checks same against record of "receiving" agent.
9. In case of "through" waybills previous items repeated.
10. Auditor makes division of percentages going to express company and the railway or railways.
11. In case of "through" waybills auditor makes like division of percentages between express companies and railways.

Affixing the postage stamp replaces all these processes in the post office.

Some of the items may have been eliminated by the use of stamps; but the postal clerk has "to ascertain the rate to be paid" to check the postage; and it is true that others are necessary when parcels are "insured," as all parcels are when sent by express. Moreover, postal clerks, even in the Christ-

mas rush, have to stop to open parcels to be sure that the "classification" is not abused—an expensive operation not common to express practice.

Mr. Lewis gives the following table, in connection with his arguments as to the elimination of large items of organization expense under postalization:

MR. LEWIS' TABLE NO. 4.

Commercial telegraph systems, 1902. Compiled from special report of United States census, telephones and telegraphs, 1902.

[Pages 101-102.]

	Receipts.	Expenses.	Per cent. of —		Number of employees of each class.	Average annual earnings
			Operating expenses (\$26,592,411)	Earnings and income from all sources (\$40,930,038)		
1. Gross receipts from operation.	\$35,300,569					
2. Operating expenses, total.		\$26,592,411	100.0	65.0		
3. Salaries, total.		1,162,632	4.4	2.8	829	\$1,402
4. Salaries, corporation officers.		230,250	0.9	0.6	54	4,264
5. Salaries, general officers.		255,740	1.0	0.6	82	3,094
6. Salaries, all other general office employees.		676,642	2.5	1.7	693	976
7. Wages, total.		13,877,041	52.2	33.9	26,798	518
8. Wages, managers and assistants.		2,898,588	10.9	7.1	5,752	504
9. Wages, operators.		8,862,349	33.3	21.7	10,179	736
10. Wages, inspectors.		573,369	2.2	1.4	2,914	469
11. Wages, linemen.		573,088	2.2	1.4	1,152	498
12. Wages, messengers.		839,360	3.2	2.1	1,208	474
13. Wages, all other wage earners.		130,287	0.5	0.3	4,746	177
14. Operation and maintenance.		9,220,948	34.7	22.5	847	154
15. Legal expenses.		194,890	0.7	0.5		
16. Rentals, offices and other real estate.		875,213	3.3	2.1		
17. Rentals, conduits and underground privileges.		7,808	(¹)	(¹)		
18. Telegraph traffic paid or due other companies.		724,826	2.7	1.8		
19. Miscellaneous.		529,053	2.0	1.3		
20. Net earnings from operation.	8,708,158					
21. Income from other sources, total.	5,629,469					
22. Dividends on stock of other companies.	1,159,658					
23. Lease of lines, wires, and conduits.	4,185,799					
24. Rent from real estate.	205,070					
25. Interest.	6,719					
26. Miscellaneous.	72,223					
27. Gross income, less operating expenses.	14,337,627					

¹ Males.

² Females.

³ Less than one-tenth of 1 per cent.

Mr. Lewis states that Items 3, 14, 15, 16, and 19, amounting to 26.8%* of the operating expenses, might be eliminated. With minor exceptions, it is not apparent how any of these expenses could be eliminated under postal management; and Mr. Lewis fails to indicate how this expense could be saved. With reference to Item 14, "Operation and Maintenance," it is impossible to make critical comment, because the item is not self-explanatory; and the Census Report from which it is taken, does not define it. It cannot contain the wages of operation or of plant maintenance, as these are shown separately in Items 7, 8, 9, 10, 11, 12, and 13. It probably includes only material and supply expense.

Item 15, "Legal Expenses," might be partly saved if the government would undertake no liability for the transmission of telegrams.

*This is Mr. Lewis' statement. As a matter of fact, these items amount to 45.1 per cent. of the operating expenses.

Neglecting Items 14, 15, and 19, the second of which is relatively unimportant, there remain Items 3 and 16, involving general administration and supervision, and rent. With respect to general administration and supervision, Mr. Lewis may have in mind that the general administration of the telegraph system can be handled by the existing postal administrative organization; but, even if this were true, it would be manifestly absurd to state that all of the existing administrative expense of the telegraph systems could be saved. That practically none of it could be saved under postal management will be clear from the following evidence:

The consensus of European opinion is that telephones and telegraphs cannot be consolidated to advantage with the Post Office as to general administration; and they are not so consolidated in Sweden, and practically not in Switzerland, Norway, and Denmark. Count Hamilton, of the Swedish Telegraph Administration, is opposed to such consolidation and quotes from a letter of a British postal investigator (Major O'Mara, formerly Chief Engineer of the British Post Office) with reference to the same subject, as follows:

"I have had the advantage during the past 18 months of having visited many of the European countries and of having met many officers of the Postal and Telegraph services in these countries. I have found that in every country I have visited there is a consensus of opinion that today the Postal Department should be administered separately from the Telegraph and Telephone Department, and in those countries in which the Post, Telegraphs and Telephones are combined under one administration in theory, I have found that at headquarters the administration of the Posts is separated in practice from that of the Telegraphs and Telephones, and that this separation extends in many cases to the Provincial Administrations. As you are aware, two Royal Commissions have recently investigated the Organization of Posts, Telegraphs and Telephones in Italy, where at the present time the Telephones are under an administration separate from that of the Post and Telegraphs. It has been strongly urged by this Royal Commission that the Telegraphs should be separated from the Posts and placed with the Telephones, and that in future the Postal Department should constitute an administration separate from that of the Telegraphs and Telephones." (See Appendix C.)

With reference to the rent of quarters, it should be noted that very little saving is possible through consolidation of telegraph and post offices for the following reasons:

1. The assumption, that in government owned buildings there is space which can be utilized without additional expense for telegraph purposes, is not supported by facts; and, if so, would be evidence of inefficient utilization by the Post Office of existing quarters.
2. Only 4,730 postal stations and branches on June 30, 1912, were in quarters owned or leased by the government, and only 616 were in federal buildings.⁴⁴ In the leased quarters, provided space has not been wasted, it is obvious that very little economy in rent could be secured by consolidating the post office and telegraph offices.
3. There are about 49,614 post offices of the fourth class,⁴⁵ the local expenses of which are entirely covered by the postmaster's salary, which does not exceed \$1,000.⁴⁶; and it is understood that some 24,000 of these postmasters receive under \$180. per annum. Obviously, no additional space could be obtained in such offices without increasing the compensation therefor.

B. RATES FOR PRIVATE AND GOVERNMENT TELEGRAPH SERVICE.

With reference to telegraph rates, Mr. Lewis' discussion relates to two propositions: the first, that the rates of the private telegraph companies in the United States are relatively high; and the second, to illustrate the result of lack of the public service motive, that no reductions in the telegraph rates have been made in the United States since 1888.

Assumption That Telegraph Rates in the United States Are Relatively High.

Mr. Lewis bases his statements that the telegraph rates in this country are relatively high, and that they stifle development and thereby result in inefficient utilization of plant, on the following statistics:

MR. LEWIS' TABLE NO. 5.

Country	Number of words	Minimum rate and average receipt per telegram.					Telegrams per capita.		Letter rates.		Letters per capita.	
		Rate—		Rank	Receipt.	Rank	No.	Rank.	Rate.	Rank.	No.	Rank.
		Per word	Each word extra.									
Luxemburg .....	...	\$0.067	\$0.0067	9	0.000	1	0.84	11	\$0.02	2	39	8
France	10	.0965	.0096	1	.121	2	1.65	4	.02	2	34	11
Japan .....	...	...	...	...	.123	3	.60	14	.015	1	23	14
Norway	10	.134	.0134	11	...	4	1.48	5	.026	3	28	13
Belgium	15	.0965	.0193	2	.142	5	1.25	7	.02	2	37	10
Netherlands	10	.1005	.0201	3	.150	6	1.19	8	.02	2	38	9
Sweden	10	.134	.0134	10	.153	7	.80	12	.026	3	29	12
New Zealand	12	.12	.01	6	.157	8	8.01	1	.02	2	93	2
Great Britain	12	.1217	.01015	7	.172	9	2.18	2	.02	2	87	3
Switzerland .....	...	1.0579	2.0048	4	.172	10	1.75	3	.02	2	70	4
Germany	10	.119	.0119	5	.180	11	.92	10	.02	2	64	5
Italy	15	.193	.01015	12	...	12	.55	16	.028	4	13	16
Denmark	10	.130	.013	8	.205	13	1.31	6	.026	3	49	6
Austria .....	...	...	...	...	.224	14	.73	13	.02	2	45	7
Hungary .....	...	...	...	...	.251	15	.59	15	.02	2	19	15
Russia .....	...	2.075	2.025	13	.390	17	.24	17	.036	5	7	17
United States	10	.25	.02	14	.360	16	.97	9	.02	2	101	1
Do. ....	...	.30	.02	...	...	...	...	...	...	...	...	...
Do. ....	...	.35	.02	...	...	...	...	...	...	...	...	...
Do. ....	...	.40	.03	...	...	...	...	...	...	...	...	...
Do. ....	...	.50	.03	...	...	...	...	...	...	...	...	...
Do. ....	...	.60	.04	...	...	...	...	...	...	...	...	...
Do. ....	...	.75	.05	...	...	...	...	...	...	...	...	...
Do. ....	...	1.00	.07	...	...	...	...	...	...	...	...	...

¹ Each telegram.² Fixed charge per telegram plus charge for each word.

The significance of the columns as to telegraph traffic development and mail development are discussed in "C. As to Social Inefficiency or Inadequacy of Private Telegraph Systems," pages 20 to 22. as to rates, Table No. 5 is incorrect, incomplete, and misleading, and the inferences drawn from it by Mr. Lewis are not justified for the following reasons:

1. The comparison does not take into account differences in methods of counting chargeable words.
2. The comparison does not include urgent rates for foreign countries.
3. The comparison covers foreign domestic rates only, whereas the international service is more nearly comparable to that given in the United States.
4. The comparison of average receipts per message is misleading, due to the duplications in counting international messages and the division of international telegraph receipts.
5. The comparison does not take into account the differences in the hauls of telegraph messages.
6. The comparison does not take into account the element of differences in costs.
7. The comparison covers only nominal prices and nominal receipts per message; whereas the actual prices and the actual receipts per message can be ascertained only by including revenue obtained by taxation to cover telegraph deficits.
8. Mail rates are not significant in comparisons of telegraph rates.

Each of these errors or omissions is discussed, in the order named, below.

Before taking up these errors in methods of comparison and in interpretation of telegraph rates, it is desirable to make such corrections in Mr. Lewis' statistics as are required for a fair, accurate discussion.

First, a word as to the terminology adopted by Mr. Lewis in this table. In connection with rates, "number of words" evidently refers to the number of words permitted at the minimum charge; "rate per word" obviously means "minimum charge"; and "rate each extra word" clearly should be "rate per word additional to those allowed under the minimum charge." Furthermore, it is assumed that the term, "average receipt per telegram," represents the average gross revenue per paid message, as otherwise the figures would have little, if any, general significance.

With this terminology in mind, corrections are necessary in Mr. Lewis' statistics as to the number of words permitted at the minimum rates, as to the amount of the minimum charge, and as to the average receipts per message.

NUMBER OF WORDS PERMITTED AT THE MINIMUM CHARGES.

Country.	According to Mr. Lewis	The Facts.
Luxemburg ⁴⁷	0	10
Sweden ⁴⁸	10	5
Italy ⁴⁹	15	10

AMOUNT OF MINIMUM CHARGE.

Country.	According to Mr. Lewis.	The Facts.
Sweden ⁵⁰	\$0.134	\$0.067
Italy ⁵¹ .....	.193	.116

In Belgium⁵² and The Netherlands⁵³ the charge for excess words is quoted only for groups of five words for telegrams of fifty words or less. Mr. Lewis has not noted this. The charge per excess word in Italy is \$.00965, as against \$.01015 shown by Mr. Lewis⁴⁹.

AVERAGE "RECEIPT PER TELEGRAM."

(This table is not significant in comparisons with revenues per message in the United States, for the reason given under "4" following.)

Country.	Mr. Lewis' Figure.	Best Figure Obtainable.
Luxemburg	\$0.090	\$0.090 ⁵⁴
France .....	.121	.173 ⁵⁵
Japan .....	.123	.141 ⁵⁶
Norway .....	.....	.213 ⁵⁷
Belgium .....	.142	.137 ⁵⁸
Netherlands .....	.150	.151 ⁵⁹
Sweden .....	.153	.159 ⁶⁰
New Zealand .....	.157	.155 ⁶¹
Great Britain .....	.172	.177 ⁶²
Switzerland .....	.172	.140 ⁶³
Germany .....	.180	.166 ⁶⁴
Denmark .....	.205	.144 ⁶⁵
Austria .....	.224	.169 ⁶⁶
Hungary .....	.251	.150 ⁶⁷
Russia .....	.390	.431 ⁶⁸
United States .....	.360	....

1. DIFFERENCES IN METHODS OF COUNTING CHARGEABLE WORDS.

It is obvious that no unqualified comparison of telegraph rates can be significant unless the rules as to chargeable words are identical. As the American rules are absolutely different from the foreign rules concerning words in addresses and signatures of telegrams, it is apparent that Mr. Lewis has not taken into account a factor of vital importance in comparing American with foreign telegraph rates.

The words of the address and signature are not charged for under American practice, with minor exceptions as to signatures, whereas a charge is made for such words under European practice⁷¹. The number of such words per telegram that are free in the United States, but charged for in Europe, is about eleven by the American counting rules, and about ten by the European rules⁵². Although it is true that the actual average number of words in the address and signature is much less in Europe than in the United States, it is noteworthy that the American method is distinctly a part of the telegraph service to patrons, and that the European method forces the use of code addresses.

The significance of the difference between the American and the European methods is indicated by the fees which the foreign public pays for the registration of addresses. For example:—

Country.	Annual Charge for Registering Telegraph Addresses.
Great Britain ⁷²	£ 1-1 (\$5.10)
Germany ⁷³	M. 30 (\$7.15)
France ⁷⁴	Fr. 40 (\$7.70)
Austria ⁷⁵	Kr. 40 (\$8.10)

It will be apparent from the above that in comparing American with foreign telegraph rates, some method of taking into account the differences in the treatment of words in addresses and signatures must be secured. Probably the most accurate method of doing this is to compare the American rates for ten words of text, the address and signature being free, with the foreign rates for twenty words, on the assumption that patrons in foreign countries will require, as in the United States, an average of at least ten words for the address and signature. Since, however, the foreign practice results in addresses of an average of five words, by the use of registered addresses, an additional comparison should be made between the American rates for telegrams of ten words of text and those for foreign telegrams of fifteen words, including address, signature and text. Such comparisons are given on page 14.

A further difference in methods of counting words relates to those in the text. The American practice is liberal as compared with foreign practice. For example:

Country.	European Count ⁸⁷		American Count	
	N	of W. lds.	N	of W. lds.
New South Wales.	3		1	
Dublin.	2		1	
Frankfort-on-Main.	3		1	

2. FAILURE TO INCLUDE URGENT RATES FOR FOREIGN COUNTRIES.

The rates quoted by Mr. Lewis for foreign countries are for "ordinary," not "preferred," telegrams, whereas the rates quoted for the United States are for regular day messages—a prompt service equal to the foreign "urgent" or "preferred" service. It should be noted that, as to the United States, Mr. Lewis has made no reference to: (a) day letters (a non-urgent day telegram subject only to the priority of day messages); (b) the night message, which is a reduced rate for night service; and (c) the night letter, a deferred night message⁸⁸.

It is not intended to imply that the American deferred services are exactly comparable with the European deferred services, or that the preferred service in the United States and Europe are exactly comparable. Nevertheless, the mere existence of an urgent rate in Europe indicates that a high charge must be paid to secure the kind of service which the American systems are equipped to handle as a matter of course. Hence, it is true that Mr. Lewis should have compared the European "preferred" rates with the American day message rates, at least in addition to using the European ordinary rates.

The following table has been prepared to remedy some of the omissions of Mr. Lewis' Table No. 5. In preparing this table, the rates shown for foreign countries are for *ten words of text*, which are allowed under the American minimum rates, plus ten words of address and signature, the average used in the United States by European count, and charged for in Europe; and also for ten words of text plus five words of address and signature, the probable actual average in Europe:

TABLE OF COMPARATIVE TELEGRAPH RATES FOR TELEGRAMS WITH TEN WORDS OF TEXT.
DOMESTIC RATES ONLY.

Country.	Ordinary Rates for 10 Words of Text Address and Signature Assumed to Average:		Preferred Rates for 10 Words of Text Address and Signature Assumed to Average:	
	10 Words.	5 Words.	10 Words.	5 Words.
Luxemburg ⁸⁷	\$0.136	\$0.102	\$0.407	\$0.307
France ⁸⁷	.193	.145	No urgent rate	
Norway ⁸⁹	.268	.201	.804	.603
Belgium ⁸⁹	.116	.096	.232	.193
Netherlands ⁹¹	.141	.121	.282	.242
Sweden ⁹²	.268	.201	.804	.603
New Zealand ⁹⁶	.20	.15	.40	.30
Great Britain ⁹³	.20	.131	No urgent rate	
Switzerland ⁹⁷	.154	.15	No urgent rate	
Germany ⁹⁴	.238	.179	.714	.536
Italy ⁹⁹	.212	.164	.637	.492
Denmark ⁹⁸	.268	.201	.804	.603
Austria ⁹⁹	.244	.183	.731	.549
United States	.25	.25	.25	.25
United States	.30	.30	.30	.30

Rates in the United States higher than 30 cents are not shown, as they apply to distances greater than ordinarily obtain under the foreign domestic rates.

It will be observed from this table that the foreign ordinary rates in many cases approximate the American rates; and that the foreign urgent rates are from two to three times the American rates in several instances, and are lower, even assuming an average of five words in address and signature, in only two cases.

3. FAILURE TO INCLUDE FOREIGN INTERNATIONAL RATES.

Mr. Lewis' Table No. 5 is misleading and incomplete, not only because of the omission of "urgent" rates in foreign countries, but also because he has included only the domestic (i. e., internal) rates for European countries. His failure to include international rates is a matter of great importance, because of the very small size of the European countries, as compared with the United States, and because of the short hauls which European domestic rates cover. Detailed information

as to lengths of hauls is given under "5" below; but at this point it will be significant to give a few European international rates in comparison with domestic rates, to show that the international rates are very much higher than the domestic rates.

COMPARISON OF INTERNATIONAL AND DOMESTIC TELEGRAPH RATES FOR MESSAGES OF 15 WORDS, INCLUDING THOSE IN THE ADDRESS AND SIGNATURE, COMPARABLE WITH AMERICAN 10 WORD, DAY MESSAGES.

From	Domestic	To Austria	To Belgium	To Denmark	To France	To Germany	To Holland	To Great Britain	To Sweden	To Switzerland
Austria ^{1a}										
Ordinary	\$0.183	....	\$0.609	\$0.670	\$0.609	\$0.183	\$0.609	\$0.822	\$0.761	*
Urgent . . . . .	.549	....	1.827	2.010	1.827	.549	1.827	....	2.284	*
Belgium ^{1b}										
Ordinary . . . . .	.096	\$0.618	....	.537	.357	.357	.241	.589	.675	\$0.560
Urgent . . . . .	.193	1.853	....	1.592	1.071	1.071	.724	....	2.026	1.679
Denmark ^{1c}										
Ordinary . . . . .	.201	.750	.536	....	.683	.469	.643	.757	.271	.643
Urgent . . . . .	.603	2.251	1.608	....	2.050	1.406	1.930	(¹⁸)	.814	1.930
France ^{1d}										
Ordinary . . . . .	.145	.579	.362	.579	....	.434	.463	.579	.724	.362
Urgent . . . . .	....	1.737	1.086	1.737	....	1.303	1.390	....	2.171	1.086
Germany ^{1e}										
Ordinary . . . . .	.179	.179	.357	.357	.428	....	.357	.535	.535	.357
Urgent . . . . .	.536	.536	1.071	1.071	1.285	....	1.071	....	1.606	1.071
Holland ^{1f}										
Ordinary . . . . .	.121	.603	.253	.573	.482	.392	....	.603	.663	.573
Urgent . . . . .	.241	1.809	.759	1.719	1.447	1.176	....	....	1.990	1.719
Great Britain ^{1g}										
Ordinary . . . . .	.150	.757	.606	.757	.606	.606	.606	....	.757	.757
Urgent . . . . .	....	....	....	....	....	....	....	....	....	....
Sweden ^{1h}										
Ordinary . . . . .	.201	.724	.637	.281	.724	.511	.637	.757 ¹⁹	....	.637
Urgent . . . . .	.603	2.171	1.911	.844	2.171	1.533	1.911	....	....	1.911
Switzerland ¹ⁱ										
Ordinary . . . . .	.131	*	.574	.574	.386	.386	.574	.806	.675	....
Urgent . . . . .	....	*	1.723	1.723	1.158	1.158	1.723	....	2.026	....

The rates in both directions frequently differ, due to the various monetary systems in Europe and to slight differences in rates methods.

*Not shown because Austria is divided into zones for purposes of international service with Switzerland.

It will be noted from this comparison of domestic and international telegraph rates that, with the exception of Denmark-Sweden, Austria-Germany and Switzerland-Austria, the international rates are at least double the domestic rates; and that on none of the other international traffic, even between points on adjacent borders not distant more than ten miles, is the rate as low as the minimum rate in the United States, with the exception of Belgium-Holland, which is about equal. Indeed, it will be apparent that the rates for international traffic are, as a whole, much higher than those in the United States, even for "ordinary" service; and immeasurably higher, for "urgent" service.

4. AVERAGE RECEIPTS PER MESSAGE ERRONEOUS AS TO COMPARISONS WITH THE UNITED STATES.

Statistics of average receipts per message are obviously intended to show an average charge per message to the patron, for use in comparisons; but such statistics are significant only when compiled on the same basis. No such statistics, however, can be compiled on the same basis for the United States and for European countries. This is due to the very great duplication in counting international messages in Europe, and to the fact that the revenues from international messages are divided between the administrations handling them in each case. For example, a telegram passing from France to Sweden (via Germany) is counted as a message in France, in Germany and in Sweden; and the total revenue therefrom (for transmission between the offices of receipt and destination) is divided between these countries in about the following proportions: France 36%; Germany 28%; and Sweden 36%. The ordinary (i. e., non-urgent) rate from Paris to Stockholm for 15 words (including average of five for address and signature) is \$.724, for a

distance of about 1,000 miles. The rate from New York to Chicago for 10 words of text (address and signature not charged for) is 50 cents for about the same distance. In Mr. Lewis' statistics, one message from Paris to Stockholm is counted as three, at an average of about 25 cents each; but the message from New York to Chicago will be included as one message, at 50 cents. Similarly, the rate for a message of 15 words (including five for address and signature) from Paris to Vienna, a distance of from 600 to 700 miles, is \$.579. In Mr. Lewis' table such a message would be treated as three messages (via Germany), at an average of \$.193 each.

It will be apparent that Mr. Lewis' comparison is very greatly in error, both theoretically, (as indicated above), and practically, due to the fact that the international traffic of European countries is, in some cases, two or three times as large as the domestic traffic. This will be shown more fully hereinafter, in connection with the analysis of Mr. Lewis' statistics of telegraph traffic development.

5. EFFECT OF LENGTHS OF HAULS ON AVERAGE TELEGRAPH REVENUES.

As is evident from the comparison of domestic and international rates, page 15, the European international rates are higher than the American rates for similar distances. As to domestic rates, however, the element of length of haul is a vital one, to which no attention is called by Mr. Lewis. The longer average hauls in the United States would naturally make rates and revenues per message higher than the respective domestic rates and domestic revenues per domestic message in Europe. This, combined with the facts that the traffic is naturally short haul in Europe, and that telegraph traffic is naturally long haul in the United States (due largely to higher telephone development), shows that the conditions are so essentially different, as to make the comparisons of American average revenues per message with European averages, without significance.

The importance of the factor of lengths of hauls is clearly indicated by the following:

(a) Comparative Areas and Distances in Foreign Countries and in the United States.

Country	Approx. Area in Sq. Miles	Per cent. of U. S. Area	Approx. Maximum Air Line Dimension	Per cent. Maximum Air Line Distance to U. S.
United States ⁸⁷	3,026,789	100.0	3,000	100.0
New Zealand	104,751	3.5	800	29.4
Austria	115,800	3.8	800*	26.6*
Belgium	11,400	.4	170	5.7
Denmark	14,800	.5	250	8.3
France	207,000	6.8	700	23.3
German Empire	208,800	6.9	900	30.0
Great Britain	121,400	4.0	770	25.6
Hungary	125,600	4.1	800*	26.6*
Italy	110,700	3.7	730	24.3
Luxemburg	998	..	50	1.7
Netherlands	12,600	.4	210	7.0
Norway	124,100	4.1	1,000	33.3
Sweden	172,900	5.7	960	32.0
Switzerland	16,000	.5	200	6.7

*This is the maximum east and west distance of Austria and Hungary combined.

(b) Significant Comparisons.

The *average* length of haul for Western Union telegrams is about 570 miles⁸⁹ and therefore *exceeds* the *maximum possible* (not the average) haul in Belgium, Denmark, Luxemburg, Netherlands and Switzerland, the domestic rates of which Mr. Lewis compares with those of the United States.

The *average length of haul* on Western Union night letters is 1,025 miles⁹⁰ and exceeds the *maximum possible domestic haul* (i. e. air-line distance) in the principal countries the rates of which are used by Mr. Lewis; and the average haul on American night letters is *nearly twice* the average distance between the largest 47 cities in western Europe (600 miles⁹⁵).

The average haul on domestic commercial telegrams in Belgium is officially stated to be 42.5 miles⁹¹. According to the "Journal Telegraphique," domestic messages constitute about 66% of the total originating commercial messages in Belgium⁹². Less than 5% of the Western Union traffic is for hauls of 40 miles or less⁹³.

More than 90% of the telegraph traffic originating in Great Britain is domestic. The mean distance between the largest cities in Great Britain is about 150 miles. More than 50% of the business of the Western Union Company exceeds 200 miles⁹⁴.

From the above it will be apparent that Mr. Lewis should not have compared rates in the United States with the domestic rates of foreign countries. However, the significance of these facts may be more clear from a comparison of results in New Zealand and in Australia, English speaking countries very similar in commercial and social aspects, but differing greatly as to area and distances between cities. The revenue per message in Australia was, in 1911, \$.26.⁹⁰ It was, in New Zealand, in 1913, \$.155.⁹⁵ In both cases there was a heavy deficit (see Appendix D); but the higher rates in Australia and the deficits, as stated hereinbefore, are officially explained as due to the extent of territory and length of lines required.¹⁷

6. DIFFERENCES IN COST OF SERVICE.

The wage schedules in the United States are much higher than those in foreign countries. (See Appendix E). Moreover, government systems pay no taxes, whereas the private systems contribute to the support of both national and local governments. These are elements of cost, of great importance in comparing rates, which Mr. Lewis entirely disregards, without considering the effect of extent of territory and lengths of hauls on the cost of the business, even if all other conditions were equal.

In other words, Mr. Lewis has assumed that the value of money is the same in all countries; whereas it is a matter of general knowledge that the value of money is much less in the United States than in Europe. This is not only proven by the statistics given in Appendix E, but by competent foreign investigators. For example, the British Board of Trade found that "the money earnings of the workman in the United States are rather more than two and one-quarter times as great as in England and Wales, and, since there is no proof that employment is more intermittent in the United States than in this country, a much greater margin is available, even when allowance has been made for the increased expenditure in food and rent."⁹⁷

A candid study of the values of money in European countries leads to the conviction that the American telegraph rates are not, in fact, higher than even the *domestic deferred* rates of European countries; and that the preferred and international foreign rates are very much higher than rates for similar service in the United States—in fact, as to the latter, it has been shown that this is true without consideration of the value of money.

7. TELEGRAPH DEFICITS.

In the preceding discussion of rates for telegraph service, the assumption that the nominal rates or revenues from telegraph traffic represent the full charge for service, has been accepted; but no conclusion in this matter can be reached without consideration of the financial results of the telegraph service. This is necessary because, when a deficit is incurred, the nominal rates and the nominal revenues do not indicate the full price of the service, but merely that portion of the price which is paid by the telegraph patrons. The question of national policy, as to whether the entire population or all the patrons of mail service should bear a part of the cost of the telegraph service, the general or frequent use of which is inevitably restricted by cost in every country to certain commercial and social classes, need not be considered here. The purpose should be solely to determine whether or not the rates and revenues used by Mr. Lewis, even after the many corrections of fact and of statistical method which they require, are true statements of the charges to the public for telegraph service.

It is certain that in many countries, and it is probable that in all countries, the telegraph rates of which Mr. Lewis has used for comparative purposes, a heavy deficit is incurred in the telegraph service. The following information supports this statement:

TELEGRAPH DEFICITS.

(For additional information and for references and authorities, see Appendix D.)

Country.	Deficit.	to Revenue.	Note.
Austria .....	.....	..	See Appendix D
Belgium .....	.....	..	No information
Denmark .....	.....	..	See Appendix D
France	\$1,880,000	23	
Germany	3,500,000	45	
Great Britain	4,653,771	30	
Italy .....	.....	..	No information
Hungary .....	.....	..	No information
Netherlands	671,431	62*	
Norway .....	.....	..	No information
Sweden .....	.....	..	See Appendix D
Switzerland .....	.....	22	Domestic telegraph business
Australia	799,206	20	
New Zealand	313,212	23	Including telephone tolls

*Netherlands makes a serious attempt to treat the accounts of the postal services on a commercial basis as a matter of permanent practice. In Australia, the figures were prepared by special investigation.

8. COMPARISONS OF MAIL RATES WITH TELEGRAPH RATES.

Although the above analysis of Mr. Lewis' rate comparison is probably sufficient to show the fallacy of his conclusions, for the sake of completeness some comment is necessary concerning his use of mail rates as a criterion for telegraph rates.

It needs no general discussion to show that first-class mail and telegrams are so dissimilar that there can be no significant relation between their cost. However, assuming that there were a fixed relation between the cost of handling mail and of handling telegrams, the wide variation in the telegraph rates and revenue in the various foreign countries having a 2-cent postage rate shows that the telegraph rates do not conform to such an assumed relation. For example: the receipts per message (corrected as given on page 13) are, in Luxemburg $4\frac{1}{2}$ times the postage rate; in France $8\frac{1}{2}$ times the postage rate; in Norway 8 times the postage rate; in Denmark about 5 times the postage rate, etc., so that there is apparently no approximately consistent relation between the two.

To summarize this analysis of Mr. Lewis' comparison of telegraph rates: It appears not only that Mr. Lewis' comparison is incorrect and misleading, but that the facts positively justify conclusions contrary to those reached by Mr. Lewis from his incomplete study. The facts are that the American rates for regular day message service are about equal to the foreign rates for domestic deferred service; and that the American rates are lower than the rates for the "preferred" service, and very much lower than those for international service of any kind. This conclusion is reached without consideration of the American reduced rates for the popular day letters, night messages, and night letters.

Statement that Telegraph Rates in the United States Have Not Been Reduced Since 1888.

Mr. Lewis makes much of the assumption that telegraph rates in the United States have not been reduced since 1888, as showing how absence of the "public service motive," even with competition, affects rates; but Mr. Lewis is seriously in error even as to the facts concerning his own country. The facts are as follows:

During the past 25 years rates in the western and southern parts of the United States (including eastern rates to the west and south) have been substantially reduced, and the tendency for all rates has been downward,—without reference to the introduction of night letters (adopted March 1, 1910) and day letters (adopted March 1, 1911). In fact as recently as July 1, 1912, the Western Union Telegraph Company made substantial reductions in 5,000,000 to 6,000,000 rates.

A brief history of telegraph rates in the United States and in Europe (ordinary rates) is given in Appendix F.

In connection with his discussion of American telegraph rates, Mr. Lewis quotes a specious, but unfair and misleading statement concerning the history of the Chicago and Milwaukee Telegraph Company and its rates. So far as this statement is used by Mr. Lewis to indicate the effect of "the private motive" on rates and traffic, the following may be noted:

1. The Chicago and Milwaukee Telegraph Company was not organized for, and during its entire history has done practically no general commercial telegraph business. It had no messengers, and received and transmitted public commercial messages only by telephone. Its rate history does not apply to ordinary telegraph business.

2. Its business was of a purely speculative character in "puts" and "calls" between the floors of the Chicago and the Milwaukee Boards of Trade. Its messages were very short, enabling it to transmit, with a small force and a small plant, a very great number of messages within a few hours; and it did not operate its business except during business hours.

3. It leased its wires at night to other concerns (Associated Press). As it had only the Chicago-Milwaukee line, this was equivalent to obtaining revenue producing business at all hours on its entire plant. In an extended public telegraph system this would obviously be impossible.

4. The rates of the Chicago and Milwaukee Telegraph Company could cover its expenses (not including profit) only when the volume of the special type of business, for which its rates were made, continued. Due to external factors, the "option" business between Chicago and Milwaukee declined or ceased about 1900. Moreover, the company had not provided for depreciation under its rates, and had to reconstruct its plant about 1900-1902 with new capital. These factors were largely responsible for the failure of the company in 1905. It is believed to have been in substantially the same hands from the time of its organization until the appointment of a receiver. Its failure is therefore, to be attributed partly to the fact that it had not during its prosperous years provided for depreciation, but chiefly to the fact that its special type of business declined for reasons other than those of competition.

5. The Chicago and Milwaukee Telegraph Company was taken by the Bell interests prior to their association with the Western Union Telegraph Company, for the use of the *telephone business* of the Chicago Telephone Company and the Wisconsin Telephone Company, and not for telegraph purposes, nor for the benefit of any other telegraph company. Its rate history subsequent to its bankruptcy is not related to the telegraph business as such, but solely to the feeling that its owners could not be justified in incurring an absolute loss in a business which they did not want, and never had wanted, and for which they did not purchase the property.

The rate history given by Mr. Lewis, with its significant omissions, may be indicative of the relation between rates and volume of traffic, although the special circumstances cited above make even this doubtful; but it may be pertinent to a general discussion of telegraph rates to point out that it is generally considered contrary to sound public or private policy to subsidize stock exchange and speculative transactions in futures for the sake of greater traffic of this character, at the expense of the general public.

C. AS TO SOCIAL INEFFICIENCY OR INADEQUACY OF PRIVATE TELEGRAPH SYSTEMS.

The preceding discussion has shown that the efficiency of private telegraph operation is not lower but higher than that of the government systems; and that the rates for privately operated telegraph service, all things considered, are lower than in foreign countries. However, in the final analysis, the development of the service and the adequacy of telegraph facilities are probably the most important tests of rates and efficiency. This Mr. Lewis recognizes and emphasizes; and he therefore attempts to support his criticism of efficiency of operation and of rates for service with the further assumptions: (1) that the development of telegraph traffic in the United States is relatively low; and (2) that the facilities for the receipt of telegrams in the United States are relatively restricted.

Assumption that Telegraph Traffic Development in the United States is Relatively Low.

Mr. Lewis bases his assumption as to telegraph traffic development on the following table, which has already been discussed as to rates and revenues:

MR. LEWIS' TABLE NO. 6.

Country.	Number of words.	Minimum rate and average receipt per telegram.					Telegrams per capita.		Letter rates.		Letters per capita.	
		Rate—		Rank.	Receipt.	Rank.	Number.	Rank.	Rate.	Rank.	Number.	Rank.
		Per word.	Each word extra.									
Luxemburg .....	..	\$0.067	\$0.0067	9	\$0.090	1	0.84	11	\$0.02	2	39	8
France	10	.0965	.0096	1	.121	2	1.65	4	.02	2	34	11
Japan .....	..	..	..	..	.123	3	.60	14	.015	1	23	14
Norway	10	.134	.0134	11	....	4	1.48	5	.02	3	28	13
Belgium	15	.0965	.0193	2	.142	5	1.25	7	.02	2	37	10
Netherlands	10	.1005	.0201	3	.150	6	1.19	8	.02	2	38	9
Sweden	10	.134	.0134	10	.153	7	.80	12	.02	3	29	12
New Zealand	12	.12	.01	6	.157	8	8.01	1	.02	2	93	2
Great Britain	12	.1217	.01015	7	.172	9	2.18	2	.02	2	87	3
Switzerland .....	..	\$.0579	\$.0048	4	.172	10	1.75	3	.02	2	70	4
Germany	10	.119	.0119	5	.180	11	.92	10	.02	2	64	5
Italy	15	.193	.01015	12	....	12	.55	16	.028	4	13	16
Denmark	10	.130	.013	8	.205	13	1.31	6	.02	3	49	6
Austria .....	..	..	..	..	.224	14	.73	13	.02	2	45	7
Hungary .....	..	..	..	..	.251	15	.59	15	.02	2	19	15
Russia .....	..	\$.075	\$.025	13	.390	17	.24	17	.036	5	7	17
United States	10	.25	.02	14	.360	16	.97	9	.02	2	101	1
Do .....	..	.30	.02	..	..	..	..	..	..	..	..	..
Do .....	..	.35	.02	..	..	..	..	..	..	..	..	..
Do .....	..	.40	.03	..	..	..	..	..	..	..	..	..
Do .....	..	.50	.03	..	..	..	..	..	..	..	..	..
Do .....	..	.60	.04	..	..	..	..	..	..	..	..	..
Do .....	..	.75	.05	..	..	..	..	..	..	..	..	..
Do .....	..	1.00	.07	..	..	..	..	..	..	..	..	..

¹Each telegram.²Fixed charge per telegram plus charge for each word.

From these statistics it appears that the United States ranks first as to development in mail traffic, and ninth as to development of telegraph traffic; and the inferences are, that the development of telegraph traffic under private operation is low, and that under government operation in the United States the development of telegraph traffic would be high. These inferences are incorrect, and any conclusion drawn from these statistics would be erroneous, for the following reasons:

1. The European statistics are heavily "padded" in the following way: Most of the countries of Europe are small in area, so that a very considerable amount of telegraph traffic is international; but, in the statistics Mr. Lewis has used, an international message is necessarily counted at least twice—once in the country where the message originates and once in the country where it terminates; and if messages pass *through* one or more countries, they are also counted in each country through which they pass. For countries similarly situated or of similar size, this method of counting may be satisfactory in comparing one with the other; but this certainly does not hold as to comparisons with the United States.

For purposes of comparing the development of telegraph traffic, it is fairly clear that only originating paid messages should be used (collect messages not being allowed in Europe), since the commercial messages originating in each country indicate the extent to which the public uses the telegraph service. The following statistics show to what extent Mr. Lewis' traffic statistics are erroneous for comparative purposes:

Country.	Per Cent. of Originating Domestic and International Commercial Telegrams to Total Telegrams Reported. ¹⁰⁰	Per Cent. of Duplication in Mr. Lewis' Statistics.†
Luxemburg	50	100
France*	73	37
Norway	50	100
Belgium*	26	..
Netherlands	65	54
Sweden	56	78
Great Britain†	89	12
Switzerland	49	104
Germany	76	32
Italy	75	33
Denmark	45	120
Austria	60	67
Hungary	73	37

*Not including pneumatic tube messages, which Mr. Lewis has included, amounting to 10,000,000.¹⁰⁰

†Based on a total which includes a large number of railroad service messages properly not included by Mr. Lewis.

†Mr. Lewis' statistics for Great Britain include messages passing exclusively over the lines of cable companies.¹⁰⁰

†This is the percentage of the amount of traffic, improperly included in Mr. Lewis' statistics,

The facts shown above indicate that Mr. Lewis' European traffic statistics are from 12% to more than 100% in excess of those which should have been used in comparing the telegraph traffic development of the European countries with that of the United States.

2. Mr. Lewis insists that the mail, telegraph, and telephone services are more or less interdependent; and it has been indicated hereinbefore that the short haul telegraph service has been supplanted in the United States by telephone service. Mr. Lewis, moreover, admits that in Europe the telephone was taken over by the government largely to protect the telegraph revenues,¹¹⁹ which can only be understood as indicating that the original policy was to restrict the telephone so far as necessary to prevent loss in telegraph traffic. That this has been the case is shown rather clearly by the fact that in Luxemburg, which has a *maximum haul* of only 50 miles, about 20% of the total originating commercial telegraph messages are domestic,¹¹⁸ and, therefore, of the character which in this country are ordinarily sent by telephone. Hence, no comparison of telegraph traffic development is, in itself, significant unless accompanied by telephone traffic development statistics; and, to be fully significant, mail development (first-class) should also be included. For these reasons, mail and telephone traffic development statistics are shown, together with the telegraph traffic statistics, in the following table:

FIRST-CLASS MAIL, TELEGRAPH, AND TELEPHONE TRAFFIC PER INHABITANT,
YEAR 1912.

Country	Population in Thousands. ¹²⁰	Traffic per Inhabitant.			
		Mail. ¹²¹	Telegrams. ¹¹⁸	Telephone. ¹¹⁹	Total.
Austria	29,056	56.5	.50	12.55 ¹²²	69.55
Belgium	7,570	50.8	.82	18.23	69.85
Denmark	2,790	58.7	.62	81.24	140.56
France (1911)	39,601	43.5 (1912)	1.15	8.36	53.01
Germany	66,640	81.8	.75	34.89	117.44
Great Britain	46,122	91.0 ¹²³	1.77 ¹²⁴	23.81	116.58
Hungary	21,213	28.5	.48	9.59	38.57
Italy	34,890	21.6	.63	9.93	32.16
Luxemburg	265	82.6	.57	18.45 ¹²⁵	101.62
Netherlands	6,078	49.3	.76	27.92	77.98
Norway	2,422	39.6	1.23	70.00	110.83
Sweden	5,004	35.6	.49	77.47	113.56
Switzerland ...	3,841	98.1	.83	17.85 ¹²⁶	116.78
United States	90,299	106.0 ¹²⁷	1.05*	161.99	269.04

Telegraph messages do not include inward international messages; transit international messages; or service messages. Ten per cent. deducted from American telegraph statistics to avoid duplications.

*Estimated for all telegraph companies in the United States, less 10 per cent. to compensate for duplications and errors.

The following table shows the rank of each country as to mail, telegraph, and telephone traffic development on the basis of the above statistics:—

Country.	Mail Development Rank	Telegraph Development Rank	Telephone Development Rank	Total Development Rank
Austria	7	12	11	10
Belgium	8	6	9	11
Denmark	6	10	2	2
France	10	3	14	12
Germany	5	8	5	3
Great Britain	3	1	7	5
Hungary	13	14	13	13
Italy	14	9	12	14
Luxemburg	4	11	8	8
Netherlands	9	7	6	9
Norway	11	2	4	7
Sweden	12	13	3	6
Switzerland	2	5	10	4
United States	1	4	1	1

From these tables the following facts, pertinent to a comparison of the telegraph development of the United States and Europe, may be noted:

The United States ranks fourth as to telegraph development in the face of the highest mail and telephone traffic development in the world; and is exceeded only by Great Britain, which has but 15% of the telephone development and only 43% of the total communications development of the United States; by Norway, which has but 43% of the telephone development and only 41% of the total communications development of the United States; and by France, which has but 5% of the telephone development and less than 20% of the total communications development of the United States.

Telephone traffic statistics are not published or compiled by the New Zealand and Australian governments, but the telegraph development in New Zealand is probably high because of the very low rate which produces a heavy deficit, as stated hereinbefore, and because of the very low development in telephone toll traffic, as shown on page 51. The development in telegraph traffic is without question due to special factors, since in Australia, which is similar in character and which also has deficit producing telegraph rates, the telegraph development is only 30% of that in New Zealand.¹²⁸

Assumption that Telegraph Facilities in the United States are Relatively Inadequate.

With reference to the assumed inadequacy of private telegraph facilities, Mr. Lewis quotes the following statistics:

MR. LEWIS' TABLE NO. 7.

Country.	Number of telegraph offices to number of post offices.
Luxemburg	1 to 0.04
France	1 to 0.07
Belgium	1 to 1.0
Netherlands	1 to 1.1
New Zealand.....	1 to 1.2
Germany	1 to 1.1
Hungary	1 to 1.3
Sweden	1 to 1.4
Italy	1 to 1.5
Great Britain.....	1 to 1.7
Japan	1 to 1.8
Switzerland	1 to 1.8
Russia	1 to 2.0
Norway	1 to 2.2
Austria	1 to 2.2
Denmark	1 to 3.0
United States*	1 to 7.7

*Commercial offices, maintained by the companies.

in connection with which he makes the following statement:

"INADEQUACY OF EXTENSION."

"It has been suggested that substantially the entire capital and current expenditures of the rival telegraph company is wasted with reference to competitive territory. The antonym of this condition is the absence of any telegraphic service at points which are unattractive to private finance. There are 64,022 post offices and branches in the United States and but 6,828 (1907) offices maintained by the telegraph companies themselves, although they treat some 22,282 railway-signal stations as telegraph offices. Converting the railway telegraph into phone signaling is reducing this rather doubtful claim for proper geographical distribution of the telegraph service, where, with the railway business having necessary precedence and amounting to double that of the commercial companies, the citizen's message, even where service was given, came as a third and last attention. These telegraph offices are maintained by the railways at their own expense and for their own

purposes, and would be quite as available for the postal administration as they are now to the telegraph companies. They can hardly be claimed as belonging to the service rendered by the telegraph companies proper. And while we are on the subject of giving the public the "advantages of public ownership, without the manifest disadvantages," a comparison of the service rendered under postal administration elsewhere and private financing here may be of interest."

This statement and its associated statistics are directly misleading and absolutely erroneous for the following reasons:

1. Mr. Lewis has included all classes of telegraph offices for foreign countries, but has excluded railroad and telephone telegraph offices for the United States. The percentage of railroad telegraph offices to total telegraph offices in some countries is greater than in the United States, as shown by the following table:—

Country.	% of Railway Telegraph Offices (for commercial business) to Total Telegraph Offices 1912.
Germany ¹²¹	13
Austria ¹²³	33.
Belgium ¹²³	2
Denmark ¹²³	68
Hungary ¹²³	48
Italy ¹²¹	24
Norway ¹²¹	26
Great Britain ¹²⁴	60
Netherlands ¹²⁷	3
Sweden ¹²¹	17
Switzerland ¹²³	21
Russia ¹²⁴	49
France ¹²⁷	16
Western Union, about	53 (Nov. 30, 1913)

It appears from the above that the European governments use railway offices very largely for telegraph purposes, although the density of population in most cases is much greater than in this country; and that in Denmark, Sweden, Russia and Hungary, the percentage of railway offices exceeds or approaches the Western Union percentage.

2. Mr. Lewis has excluded the various telephone offices used for telegraph purposes for the United States, but has included such offices for foreign countries. Statistics concerning such offices are generally not published by the foreign governments, but the facts which follow concerning New Zealand illustrate the unfairness in Mr. Lewis' statistics, which cover only directly operated Morse offices in the United States. The Annual Report of the New Zealand Administration for 1910 states, as to total telegraph offices: "Of these, 300 were telegraph offices and 1,663 were telephone offices."⁵ Probably this means that only 300 were Morse operated offices³⁰ (the only kind Mr. Lewis has used for the United States).

3. In eliminating all offices except directly operated Morse offices for the United States, Mr. Lewis infers that the service from the offices excluded is inferior. The facts concerning delays in transmission in various types of foreign telegraph offices are not available; but so far as the adequacy of facilities to the public is concerned, the length of hours of telegraph offices is a very significant factor which Mr. Lewis has overlooked; and one as to which the following statistics are pertinent, as showing that the telegraph companies give a more complete service than the governments:—

Percentage of Total Offices, 1912			
	Open Day and Night.	Complete or Prolonged Day Service.	Limited Day Service.
German Empire ¹²⁴	1.3%	17.8	80.9
Austria ¹²⁴	1.2	8.4	90.4
Belgium ¹²⁴	1.0	26.0	73.0
Great Britain ¹²⁵	1.5	3.5	95.0
Norway ¹²⁵.....	.3	10.0	89.7
France (1911) ¹²⁶.....	.1	5.3	94.6
Hungary ¹²⁴	1.2	14.1	84.7
Netherlands ¹²⁴.....	.7	16.9	82.4
Sweden ¹²⁴	1.6	43.0	55.4
Switzerland ¹²⁶.....	.3	19.4	80.3
New Zealand (1910) ¹²⁷	0.0	95.0†	5.0
Australia (1911) ¹²⁸.....	.2	50.0	49.8
Western Union Company ¹²⁷ :			
Open day and night.....	19.3%		
Open midnight or later.....	5.9		
Open until from 10 p.m. to 12 midnight	6.4		
Western Union offices open later than 10 p.m.....	31.6		

*Covers government offices only.

†This percentage should be read in the light of the statistics as to hours of telephone operation in New Zealand, page 29.

The term "Complete or Prolonged Day Service" is not defined in the "Journal Telegraphique," from which the above statistics for foreign countries are derived; but, in general, "Complete or Prolonged Day Service" does not extend beyond 10 o'clock p.m. Most of the Telegraph Administrations do not give, in their annual reports, statistics as to the hours of service of their telegraph offices. In the case of Switzerland, however, full information of this character is given, and will serve to indicate the significance of the comparison shown above.

TELEGRAPH OFFICES—SWITZERLAND, 1912.¹²⁹

No. of Offices with Continuous Service.....	6
No. of Offices Open until 10 p.m.....	17
No. of Offices Open until 9 p.m.....	359
No. of Offices Open from 7 or 8 a.m. until 12 m., and from 1 p.m. to 8:30 p.m.....	84
No. of Offices Open from 7 or 8 a.m. until 12 m. and from 2 p.m. to 6 p.m., and from 8 p.m. to 8:30 p.m.....	1,908
Total	2,374

From these statistics it appears that the Western Union Company:

- a. Has a very much higher proportion of all-night offices than any government.
- b. Has, in proportion, a greater number of all night offices only, than the *all-night and "complete or prolonged day" offices, combined*, in either Austria, Great Britain, Norway, France, Germany, Hungary, or The Netherlands.

4. The above is significant on the assumption that the number of telegraph offices in the United States is relatively as great as in Europe. This Mr. Lewis disputes on the basis of statistics which exclude all but directly operated offices in the United States, which, as has been shown, should be included.

Mr. Lewis, however, believes that the assumed inadequacy of telegraph facilities in the United States is attributable to the lack of the "public service motive." In this connection it is pertinent to note that in Great Britain, at least, many Post Office telegraph offices are maintained by local community or personal *guarantees*, "under which the guarantors agree for a term of seven years to pay one-third of any sum whereby the telegraph receipts may fall short of the annual cost of maintenance." The latest statistics indicate that there were 900 such offices in Great Britain in 1913, and that 65% of the telegraph offices added during the year were opened on this basis.¹³⁰ A similar practice is in effect in Switzerland.¹³¹

5. As is shown above, Mr. Lewis should have included all telegraph offices in the United States, regardless of the method of operation or the financial basis on which they are conducted. Mr. Lewis states the number of post offices and branches as 64,022, and, although this includes post offices in Alaska, Hawaii, etc., where the American land line companies do not operate, this figure may be used. The number of Western Union Offices on October 31, 1913, was 36,491. Estimating the number of telegraph offices of other telegraph companies at 5,000, there are, say, 42,000 telegraph offices in the United States; or 1 telegraph office to 1.52 post offices, against 1 telegraph office to 7.7 post offices, according to Mr. Lewis. The fact is that, in relation to post offices, there are more telegraph offices in the United States than in Great Britain, Japan, Switzerland, Russia, Norway, Austria, Denmark, or Australia (the latter is 1 to 1.8; not shown by Mr. Lewis¹⁴⁰).

From the above it is clear that, in spite of the area covered and the high development of telephone facilities in the United States, its telegraph facilities are not restricted; and are, in fact, better than in many of the most important countries referred to by Mr. Lewis.

Summary as to Telegraphs.

Mr. Lewis' propositions concerning telegraphs were: that the institutional efficiency of private telegraph systems was relatively low; that their rates were relatively high; and that the development of their service was relatively low. These propositions he attempted to prove by various assumptions which were erroneous. In rebutting his assumptions and conclusions, it has been shown:

1. That high efficiency in the United States Post Office has not been demonstrated.
2. That the efficiency of the private telegraph organizations is not relatively low, but relatively high.
3. That the theoretical savings in routine operations under postalization could be secured only by curtailment of service.
4. That the theoretical savings in administration of telegraphs under postalization could not be effected, and are not effected when governments operate the telegraph.
5. That the theoretical savings in rent under postalization are small and doubtful of actual accomplishment in practice.
6. That rates of private companies are not high as compared with domestic foreign rates as a whole for similar service.
7. That rates of private companies are lower than those of governments for similar service on international lines.
8. That private companies have reduced their rates considerably during recent years, a fact which escaped Mr. Lewis' observation.
9. That government rates, though not lower than private rates, result in heavy deficits.
10. That the telegraph traffic development in the United States is high, and, in view of the great telephone development in the United States, is exceedingly high.
11. That the facilities for telegraph service are not poor in the United States, but, length of hours of offices considered, are probably the most adequate in the world.

II. TELEPHONES.

Mr. Lewis' discussion of telephones is directed to the proof of three propositions: (A) the relative inefficiency of private telephone operation; (B) the relatively high prices of private telephone service; and (C) the social inefficiency or inadequacy of private telephone systems; and his statistics and arguments will be analyzed under these headings.

A. AS TO THE RELATIVE INEFFICIENCY OF PRIVATE TELEPHONE SYSTEMS.

Mr. Lewis' only support of his assumption of low institutional efficiency of the Bell Companies is the following table:

MR. LEWIS' TABLE NO. 8.

Telephone operative efficiency.

Country.	Telephone units per employee per annum.	Rank.	Postal units per employee per annum.	Rank.
Norway	14,854	1	32,414	11
Russia	114,659	2	.....	..
Belgium	98,715	3	85,819	1
Netherlands (municipal).....	92,251	4	.....	..
Sweden	79,142	5	35,837	9
Denmark (private)	79,000	6	.....	..
Italy	67,727	7	42,947	4
Netherlands (private).....	65,181	8	.....	..
United States (Bell Co.).....	58,134	9	60,651	2
Norway (private)	50,751	10	.....	..
Switzerland	47,328	11	37,562	7
Netherlands (State).....	38,912	12	53,621	3
France	34,018	13	33,697	10
Luxemburg .....	.....	14	40,321	5
Denmark .....	.....	15	38,930	6
Germany .....	.....	16	37,236	8
Austria .....	.....	17	30,528	12
New Zealand .....	.....	18	28,696	13
Great Britain.....	.....	19	26,056	14
Hungary .....	.....	20	23,025	15
Japan .....	.....	21	21,820	16

The fallacy of conclusions drawn from these statistics is indicated by the analysis of Mr. Lewis' Tables No. 1, 2, and 3, hereinbefore, in the discussion of which it is shown that the statistics of postal efficiency are not correct; so that, so far as Mr. Lewis draws conclusions from the assumed rank as to postal efficiency, such conclusions are unsound.

In general, the discussion of Mr. Lewis' statistics as to postal and telegraph efficiency cover his similar statistics as to telephone efficiency. However, the statistics of telephone efficiency are erroneous for the following additional reasons:

1. Mr. Lewis apparently derived his statistics of telephone efficiency from the "Journal Telegraphique." A study of the data which he used shows that he neglected the fact that the figures on the "total number of employees" given in that source are generally qualified in explanatory notes (see page 7), and that those qualifications render the figures absolutely unsuitable for Mr. Lewis' purpose; for to show "telephone operative efficiency," the whole number of telephone employees must be considered, as Mr. Lewis admits by his assertion that "all kinds of employees of the telephone and post are included in the statement."

The following are the facts concerning Mr. Lewis' errors in this respect:¹⁴¹

Norway—State System. The long distance staff is largely joint telephone-telegraph. Statistics used by Mr. Lewis include only *exclusively telephone* employees; and hence also do not include executive officers and staffs.

Belgium. Joint telephone-telegraph employees are not included in the statistics used by Mr. Lewis (see also page 7).

Sweden. The statistics used by Mr. Lewis exclude all telephone plant employees, accounting employees and all employees of the executive department.

Switzerland. The statistics used by Mr. Lewis exclude 24 apprentice operators, 647 operators who have other work in addition to telephone duties, and 222 auxiliary operators.

France. Mr. Lewis' statistics include only such employees as devote their entire time to telephone work.

Italy. The actual computation for Italy, from statistics in the "Journal Telegraphique," gives an efficiency of 38,490 calls per employee (1910) as against 67,727 per employee quoted by Mr. Lewis.

Netherlands. The statistics used by Mr. Lewis include operators only.

Bell Companies. The efficiency of the Bell organization, including *all* employees, and equated by Mr. Lewis' method, was 72,000 calls per employee in 1912, as against 58,134 quoted by Mr. Lewis.*

It will be apparent from the above, even assuming that Mr. Lewis' method and his data as to traffic are correct, that the "telephone operative efficiency" of the foreign countries named above is far below that shown in Table No. 8.

2. Mr. Lewis' statistics of conversations are widely in error, due to his assumption that one toll or long distance conversation is equal to four local conversations. No broad equation of toll traffic in this manner is possible. For example: The amount of operating work involved in a long haul toll conversation is ordinarily much greater than for a short haul toll message. Again, the amount of labor involved depends upon whether there is a direct circuit between the terminating points, or whether it is necessary to engage the time of several operators in "building up" the circuit desired. Moreover, there is a very great difference in the kinds of toll calls. In the case of one class of toll calls, known as "particular person" calls, the calling subscriber asks to be connected with a particular person at the distant point, in which case the operators not only have to obtain the telephone at which the called subscriber will presumably talk, but also to secure the particular person desired before the conversation can begin. In the case of a second class of toll calls, generally known as "two-number" calls, the calling subscriber asks to be connected with a specified telephone, and if a particular person is desired, must himself secure the person after the connection is established, or, if the person is not there, must give his instructions to whoever answers at that telephone.

In Europe generally the two number system only is used, so that the operators perform merely the functions of establishing a connection with the called telephone. In the United States the particular person type of toll service is usually given, so that the function of the operators is not merely to establish a connection between two telephones, but to secure for the calling subscriber a particular person. That this class of calls is more expensive to handle is evident from the fact that a special charge is made for this type of service in at least Denmark¹⁴⁷, Norway¹⁴⁸, and Sweden¹⁴⁹.

For these reasons an average "toll" call cannot even be approximately equivalent in different countries.

3. There is a serious duplication in the counting of toll conversations in the European statistics. This is due to two causes: (a) the method of counting international messages; and (b) the practice of counting as a separate conversation each rate unit of time (usually three minutes) or fraction thereof used in a conversation.

(a) The reasons for the duplication in counting international telegraph messages are given hereinbefore, in connection with the discussion of telegraph rates and telegraph traffic development (see pages 15, 20). A similar duplication necessarily exists as to international telephone traffic, each conversation being counted as one or more messages in the country in which the message originates, the country in which it terminates, and, in some cases, the country through which it passes. In the case of telegraph messages, this duplication is very apparent in Mr. Lewis' source, the "Journal Telegraphique," since such messages are classified as "international outward," "international inward," and "international transit." In the case of telephone messages, however, this duplication is not apparent except by tracing the statistics beyond the source which Mr. Lewis has used. For example:

*However, Mr. Lewis also quoted the figure 65,287, in another connection.

The figure for interurban conversations given in the "Journal Telegraphique" for Belgium is 1,816,793¹⁴² (1910). This agrees with the statistics given in the Annual Report of the Belgian Telegraph Administration, where it is shown, however, that this total includes 464,044 international messages *including both incoming and outgoing messages*.¹⁴³

It will be apparent that the amount of this duplication in most European countries is considerable, as in the case of telegraph messages; and that it results in a very serious inflation of the "units" per employee in Mr. Lewis' "efficiency" statistics, where a single toll conversation is counted as four "units."

(b) In most countries the unit period of toll conversation is, as Mr. Lewis shows, three minutes. In most European countries, however, each three minutes or fraction thereof of an actual conversation is counted, for statistical purposes, as a separate conversation. This is not the American practice, so that Mr. Lewis' statistics for foreign countries are again inflated. This statement needs no further substantiation than a quotation from the instructions of the International Telegraph Bureau, accompanying the form on which the statistical returns are made by the various governments for publication in the "Journal Telegraphique." The instruction is as follow:—

(Translation) "Each interurban conversation is counted as a unit, independently of the number of central offices through which it passes, if it is completed within the unit period of time authorized under the rate system used. If it (the conversation) extends beyond this period, it is counted as many times as there are rate periods."¹⁴⁴

In the United States from 25% to more than 50% of the toll conversations extend beyond three minutes, and from 3% to 10% extend beyond six minutes, varying with the length of haul; but each message, regardless of duration, is counted as one message. This indicates how serious the duplication in the European method of counting is, in comparisons with toll traffic in the United States. In Sweden the number of rate units used is 31% higher than the number of actual conversations.¹⁴⁵

4. The term "phone call," used by Mr. Lewis, is not defined. The statistics for the Bell System cover completed conversations or messages only; but it is possible that those for foreign countries include attempted calls, since the record of completed conversations is obtained only by deducting from this total of calls, completed and attempted, the percentage, determined by careful observations, of calls not completed because: (a) the called subscriber does not answer; (b) the called subscriber's line is busy; etc.* Hence, the statistics for the Bell System are compiled under the most restrictive definition—in fact, a much broader definition is used for routine administrative purposes in determining the efficiency of operation. The significance of this statement is indicated by the fact that the Census Bureau in quoting statistics of telephone conversations in the United States for 1912 (in published advance sheets) states in a note that those for the Bell Companies include only completed conversations whereas those for other companies probably include uncompleted conversations in addition. In view of these facts, and in the absence of specific information to the contrary, it is pertinent to question whether or not the foreign statistics are comparable with those used for the Bell System.

In central offices in exchanges having more than one central office, calls must be classified, to determine the efficiency of each central office, into outward or originating calls, and into terminating or inward calls, since a large proportion of the calls pass from a subscriber in one central office to a subscriber in another central office, thereby requiring the attention of operators in both central offices. The Bell statistics include outgoing completed messages only, regardless of the number of central offices involved. It is probable that the foreign statistics include originating calls and inward trunked calls,† especially as the International Telegraph Bureau has found it necessary in giving instructions, concerning the compilation of statistics of *interurban* conversations, specifically to state that the number of central offices through which the calls pass should not be considered in counting messages.

*This refers to total calls of an exchange. Completed conversations for individual subscribers under message rates are determined by registers or by making tickets.

†The duplication is of course similar to that encountered in the foreign method of counting international messages.

5. Mr. Lewis' assumption, that a local call is the same in all countries, is unwarranted. In addition to differences due to various types of equipment and methods of operating, an important difference relates to the number of calls which are trunked. This chiefly depends upon the number of central offices in the exchange area. Calls which must be passed from one central office to another require the services of two operators. Due to the very high development in the United States, especially in the large cities, it is probable that the percentage of calls trunked is much higher in the United States than in Europe.

Another difference in the labor value of local conversations relates to the hours of service. It is a general practice in the United States to give service during all hours day and night, and on all days. This means that a considerable number of employees must be provided during late night hours largely for occasional and emergency service, and that these employees handle relatively few calls. Under the government systems very few exchanges have night service, so that, other things being equal, the operative efficiency would tend to be less, on the basis of Mr. Lewis' statistics, in the United States than in foreign countries. Hence, Mr. Lewis' statistics, in effect, tend to penalize the Bell Companies for their much more complete public service. That this factor is one of great importance, not only as affecting "operative efficiency," but as regards utility of service to the public, is indicated by the following statistics concerning the hours of telephone operation in several foreign countries:—

SWITZERLAND.¹⁴⁹

Hours of Service.	% of Total Offices.
With continuous service.....	3.5
From 6 a.m. to 9 p.m.	42.0
From 7 a.m. to noon, and from 1 p.m. to 8:30 p.m.....	8.0
From 7 a.m. to noon, and from 2 p.m. to 6 p.m., and from 8 p.m. to 8:30 p.m.....	46.5
	100.0

NEW ZEALAND.¹⁵⁰

Hours of Service.	% of Total Offices.
With continuous service (week days).....	6.3
Open later than 5 p.m., but not after midnight.....	34.1
Open from 9 a.m. to 5 p.m. only.....	59.6
	100.0
Open more than two hours on Sunday.....	7.4
Open two hours or less on Sunday....	7.9
Not open on Sunday.....	84.7
	100.0
Not open holidays.....	80.0

SWEDEN.

There are only 75 central offices, in 2,064 central offices and switching stations, giving day and night service; and in many of the exchanges where all night service is given, a special message charge is required for each conversation during night hours.¹⁵⁰

BELGIUM.

In what is known as the "Brussels Group," which consists of the city of Brussels and environs, and which has over one third of the telephones in the entire country, there are 23 central offices, of which only two are operated day and night. Of the remainder, 19 are open only from 7 a. m. to 9 p. m., one is open until 8 p. m., and one until 7 p. m. Those which are open all night are offices within the city of Brussels.¹⁵¹

The above facts indicate, very clearly, not only that Mr. Lewis' statistics of operative efficiency are erroneous because of the elimination of large numbers of employees in foreign telephone service, because of the duplications in the count of toll messages in foreign countries, because the method of equating traffic is not even roughly approximate, because of the probable differences in methods

of counting local messages, and because local messages cannot be even roughly equated for foreign countries; but also that, under government systems, there is not given the broad, full service which would secure the highest utilization of the system on which Mr. Lewis lays so much stress, although, possibly, their practice of limiting hours of service very largely to the daylight period may assure full loads for operators while on duty. Even under these conditions, the evidence makes it clear that the number of calls per employee in the Bell System is much greater than in any other country.

However, there are other facts available which are more indicative of the institutional efficiency of the private systems. Of these, perhaps the most significant are those relating to the cost of plant under government ownership; for if it costs a government more per unit to build plants, in spite of the differences in price levels, it is obvious not only that the constructive efficiency of the governments is inferior, but that inevitably this inefficiency must result in unnecessary burdens on the public, either through rates or through taxation. The following statistics show the average investment per station of the various systems. These statistics are *all official*, though not all published:

AVERAGE INVESTMENT PER TELEPHONE.¹⁵³

January 1, 1913.

Country.	Average Investment per Telephone.
Austria	\$211
Belgium	276
France	257
German Empire.....	178
Hungary	192
Luxembourg	176
Switzerland	190
Australia	163
United States (Bell)*.	153

*January 1, 1914.

In Norway, Sweden, Denmark, Italy and The Netherlands telephones are operated under both private and public management; but, inasmuch as the governments own the toll lines but do not own all the telephone stations using such lines, and as the companies own large numbers of stations but few toll lines, the investment statistics for these countries would of course not be significant.

B. AS TO THE RELATIVELY HIGH PRICES OF PRIVATE TELEPHONE SERVICE.

Mr. Lewis' assumptions concerning telephone rates relate to those for both exchange and toll service. Regarding rates for exchange service, he introduces tables purporting to show that the average exchange rate per message is higher in the Bell System than under government operation; that the rates for local service in large cities are high under Bell operation and low under government operation; and that Bell rates are exorbitant, as shown by the history of rates under competition and by comparisons of rates in competitive and non-competitive exchanges. Concerning toll rates he gives a table purporting to show that American toll rates are very high as compared with government toll rates. These tables are analyzed below.

Assumptions as to Foreign and Bell Exchange Rates.

Mr. Lewis first shows a comparison of "local" rates, by which he means the average exchange revenue per local message. With these rates he compares letter rates, and shows the percentage by which the telephone "rate" exceeds or is exceeded by the letter rate.

MR. LEWIS' TABLE NO. 9.

Letter and local telephone rates.

Country.	Rank.	Local rate.	Letter rate.	Letter rate exceeds phone rate. per cent.
Norway (private).....	1	\$0.004	\$0.026	550
Sweden	2	.005	.026	420
Japan	3	.005	.015	200
Norway	4	.006	.026	333
Russia	5	.007	.036	414
Hungary	6	.009	.020	122
Denmark (private).....	7	.010	.026	160
Austria	8	.011	.020	80
Italy	9	.013	.028	115
Germany	10	.015	.020	33½
Netherlands	11	.015	.020	33½
Belgium	12	.015	.020	33½
Switzerland	13	.017	.020	17
United States (Bell Co.).	14	.021	.020	†5
Luxemburg	15	.024	.020	†20
France	16	.024	.020	†20

*Belgium, 1911.

†Phone rate exceeds letter rate.

Mr. Lewis states, in connection with this table, that the inference which may be drawn from the rank of the Bell rates is not to be explained on the ground that the United States postal rates are too low. "It yields, in fact, a profit of just one-third." The reliability of this statement is suggested in the discussion of postal deficits, pages 2 to 4, hereinbefore.

Even if it were assumed that these statistics are correct, this table could not be construed as supporting an argument for government ownership, because, according to Mr. Lewis, private companies in Norway rank first as to low rates, because the private companies in Denmark rank higher than several important government systems, and because the Bell rates, as shown by Mr. Lewis, are exceeded in the government systems of Luxemburg and France. In general, these statistics exclude so many factors that no attempt to answer them in detail is warranted, particularly as accurate statistics which are significant and which indicate the actual situation, are given independently hereinafter, and are the best answer to such a vague comparison. However, for the sake of completeness, the following facts may be helpful in correcting any unwarranted impressions they may give:

1. Mr. Lewis' statistics are in error as follows: The Bell figure should be \$.017 (1912), which is below the postage rate; and the Switzerland figure should be \$.028.¹⁵³ These facts are of some importance as they give the Bell Companies a better rank than the government systems of Luxemburg, France, and Switzerland.

2. Such slight significance as attaches to these statistics is destroyed by the very doubtful character of the data as to local conversation in foreign countries, discussed on page 28.

3. The letter rate is not an index either to the cost or the value of the telephone message. Telephone service and mail service are so dissimilar that no comparison of prices is significant. The wide variation in the relation of the telephone rate to the letter rate in those countries where the government operates both services proves this.

4. If Mr. Lewis intends to use the letter rate as a standard of value, the wide variations in the telephone rate in countries like Norway, Sweden, Denmark, Holland, and Belgium, where conditions are substantially alike, show that the letter rate cannot be so used.

5. On the basis of Mr. Lewis' own statistics, it is apparent that, as a whole, rates are lower where private companies operate. Of the six countries having a rate of \$.01 or less, as shown by Mr. Lewis, four, namely, Norway, Sweden, Russia, and Denmark, are very largely operated by private companies. Of those in which the rate is more than \$.01, as shown by Mr. Lewis (excepting the United States), there are only two out of eight, Italy and The Netherlands, in which private concerns operate.

Mr. Lewis also gives the following statistics, from which he draws no general conclusions, but which are intended to indicate that the rates in the United States are high as compared with government rates.

MR. LEWIS' TABLE NO. 10.

Table giving annual rates for business service, per message, for various cities.

Christiana	\$21.44
Stockholm	24.44
The Hague	26.00
Copenhagen	32.00
Tokio	34.00
Auckland, New Zealand	34.00
New Haven	34.00
Cincinnati	100.00
Oakland, Cal.	84.00
Philadelphia	84.00
Chicago	84.00
Denver	138.00
Amsterdam	36.00
Rotterdam	36.00
Berlin	43.20
Budapest	57.00
Paris	77.20
London	82.79
Boston	125.00
Seattle	90.00
Washington	168.00
Baltimore†	174.00
San Francisco	180.00
New York‡	228.00

American average exceeds foreign average 300 per cent.

*Competition.

†Recently this rate raised to \$125; competition presumably removed.

‡Baltimore and New York limited to 5,400 and 5,700 calls.

This comparison is misleading and incorrect, because:

1. It is a comparison of rates in exchanges having exclusively unlimited service with those having chiefly, or exclusively, message service. Mr. Lewis admits that such a comparison does not warrant definite conclusions, and for this reason gives a second table (Table No. 11) in which rates in what purport to be exclusively message service exchanges are compared. However, it may be well to note, in connection with Table No. 10, that flat rates are quoted exclusively only in The Hague, Tokio, Auckland, Amsterdam, Rotterdam, Budapest, and Paris; and that in none of the cities named are the Bell Company rates exclusively flat rates.

2. The rates compared are maximum rates, whereas in most flat rate cities not more than 10% of the subscribers pay maximum rates, and in message rate exchanges less than 1% pay the maximum quoted charge, excluding Private Branch Exchange subscribers.

3. A comparison of minimum rates would be more significant because, in many cases, the minimum rate is used by the plurality of subscribers, and because it indicates the availability of the service. In this connection it may be noted that, whereas the mean maximum American rate is \$133.02 and the mean maximum rate in the foreign cities is \$43.46 (as shown by Mr. Lewis), the mean minimum rate in the American cities is \$23.17 as against the mean foreign minimum rate of \$28.80. The minimum rate of the American cities includes at least 365 messages per annum, whereas in two of the European cities the minimum rate includes no outward service.*

4. The statement that the Chicago rate has recently been increased to \$125, "competition presumably removed," is incorrect. The rate of \$84 is a flat rate of the independent company still operating; and the \$125 rate of the Chicago Telephone Company has been in effect for many years, and was authorized by the Chicago City Council after complete public investigation in 1907. Under the Chicago telephone rate ordinance of 1913, this flat rate of \$125 was abolished as to all new subscribers, and in its stead a rate of approximately \$125 for not more than 6,000 messages was established. It should be noted that no change in rates in Chicago has ever been made as a result of competition. It is also important to note that the rate of \$84 is the only rate quoted by the independent company for business service, and that *more than 60% of the Chicago Bell business subscribers† pay less than the independent company's minimum business rate.*

*Stockholm and Copenhagen.

†Not including Private Branch Exchange subscribers.

5. Mr. Lewis' Table No. 10 consists of a list of cities not selected with regard to size, population, or the number of telephones. It is a matter of general knowledge that rates in large exchanges must be higher than in small exchanges. For example, the rates of the Post Office in London are higher than in the provinces; the rates in Berlin are higher than in other German exchanges; the rates in Paris are higher than in other cities in France.

6. A comparison of the rates in the foreign exchanges, named by Mr. Lewis, having unlimited service exclusively, with those in the United States of similar size having unlimited service exclusively, shows that the foreign rates are higher:

Foreign Exchanges^{10a} Named by Mr. Lewis

Bell Companies.

Name of Exchange.	Number of Telephones	Maximum Rate.	Minimum Rate.	Name of Exchange.	Number of Telephones.	Maximum Rate.	Minimum Rate.	% of Subscribers Paying Not More Than Foreign Minimum Rate.*
The Hague....	11,594	\$36.00	\$24.00	San Antonio	11,231	\$60.00	\$18.00	78%
Tokio	34,910	40.50	31.50	Omaha	33,358	72.00	24.00	79%
Auckland	5,892	38.88	16.61	Terre Haute	4,328	42.00	18.00	...
Amsterdam	14,341	46.00	46.00	Rochester ..	14,010	48.00	24.00	77%
Rotterdam	12,442	44.00	34.40	St. Joseph...	12,094	60.00	24.00	81%
Budapest	24,567	60.90	60.90	St. Paul....	23,426	72.00	24.00	94%
								Under \$77.00
Paris†.....	95,033	77.20	77.20	New York...	483,653	**\$36.00 and \$42.00		79%
				Philadelphia.	133,523		18.25	90%
				Chicago ...	308,177		24.00	91%

*The per cent. of subscribers paying not more than the foreign minimum rate, is based on main stations, excluding private branch exchanges, coin boxes and public pay stations.

†These rates include "entrance fees" where charged and therefore represent the cost of service for the first year.

‡There is no exchange in the United States having 95,000 telephones or more, with exclusively unlimited service, so that the minimum rates of New York, Philadelphia and Chicago are shown for comparison with Paris rates.

**For Manhattan; lower rates in other parts of the city, minimum \$24.00.

Recognizing some of the inconsistencies in Table No. 10, Mr. Lewis also quotes the following statistics of rates in message rate exchanges:

MR. LEWIS' TABLE NO. 11.

Rates per call for measured service in principal cities of the world.

Country.	Per call.		
	2,000 calls.	5,000 calls.	10,000 calls.
Switzerland, Berne	\$0.0140	\$0.0116	\$0.0100
Cincinnati, Ky .....	.0450	.0360	.0238
Belgium, Brussels .....	.0184	.0100	.0060
Baltimore, Md. ....	.0500	.0336	.0312
Australia, Sydney .....	.0197	.0106	.0086
Washington, D. C. ....	.0490	.0366	.0283
Italy, Rome .....	.0200	.0140	.0120
New Orleans, La. ....	.0400	.0280	.0240
Austria, Vienna .....	.0200	.0160	.0100
Cincinnati, Ohio .....	.0450	.0360	.0330
Germany, Berlin .....	.0216	*.0086	*.0043
Boston, Mass. ....	.0450	.0360	.0330
France, Paris .....	.0240	*.0154	*.0077
New York, N. Y. ....	.0555	.0420	.0400
Denmark, private .....	.0294	.0197	.0171
San Francisco, Cal. ....	.0648	.0487	.0265
Average postal telephone rate.....	.0197	.0123	.0085
Average American telephone rate.....	.0493	.0371	.0300
American rate exceeds postal (per cent.)	167	200	215
American rate exceeds Australian (per cent.).....	150	250	250

*Computed on flat rates.

This comparison is erroneous and misleading for the following reasons:

1. It is *not* a comparison of rates for message service, for the rates in effect in Brussels, Rome, Paris, and Vienna are not message rates. Hence, four out of the eight foreign cities should be excluded since, as Mr. Lewis admits, flat rates cannot be compared properly with message rates.

2. When both flat rates and message rates are quoted, Mr. Lewis uses whichever is the cheaper in computing his statistics for foreign cities (for example, in Berlin); but in preparing his statistics for some American cities (Boston, Cincinnati and New Orleans) he has not done this.

3. The exchanges compared vary so widely as to the number of telephones, as shown by the following table, that in most cases no comparison of rates could be significant:

JANUARY 1, 1913

FOREIGN CITIES		COMPARED WITH	
City	Telephones ¹⁸⁵	Telephones	City
Berne	5,113.....	57,186	Covington, Ky. (Part of Cincinnati ex. exchange)
Brussels	21,470	51,170	Baltimore, Md.
Sydney (1912)	22,000	147,207	Washington, D. C.
Rome (1911)	10,349	18,882	New Orleans, La.
Vienna	30,747	57,186	Cincinnati, O. (including Covington)
Berlin	144,543	155,703	Boston, Mass.
Paris	95,083	148,628	New York
Copenhagen	50,802	107,702	San Francisco, Cal.
Average	50,720.....	131,656	Average

4. The rates in Berlin do not include night service, for which a special charge of about 5 cents per night message is made both to message rate and flat rate subscribers. It should be noted that this charge is in addition to any charges which would apply on day messages.¹⁸⁶ A very large amount of traffic is handled during night hours in large American cities, so that obviously no comparison could be made between the Berlin rates and those of any American city.

5. The comparison relates only to rates for individual line business service. On what basis it is assumed that a comparison of rates for this class of service only is supposed to be significant, is not clear. As a matter of fact the rate for this service is not only the highest, but is also, from the standpoint of the public, among the least important. Not only do the very great majority of the subscribers in Bell exchanges receive service at lower rates, but the great majority are residence subscribers who receive service at very much lower rates.

It will be seen from all of the above that Mr. Lewis' Table No. 11 is not significant in any way. As a matter of fact, a comparison of this general type that covered even the chief factors of importance in the respective rate schedules would be so intricate as not to permit any general conclusions therefrom.

A General Comparison of Foreign and American Exchange Rates.

Mr. Lewis has attempted to indicate the general relation between American and foreign exchange rates by isolated comparisons. As has been shown, his methods and the specific rates selected were far from correct; but such detailed comparisons must necessarily fail as a basis for general conclusions. As it is intended to give the facts pertinent to the phase of the government ownership question under discussion, however, an attempt is made below to supplement the criticism of Mr. Lewis' statistics and conclusions, as completely as brevity and the technical character of the subject will permit, with general information indicating the ultimate effect of government ownership on telephone exchange rates as a whole.

1. It should be noted not only that Mr. Lewis' comparisons of rates, with the exception of Table No. 9, are without significance because of the comparison of flat rates with message rates, and of rates in large exchanges with those in small exchanges, but also that no comparison of rates for a specific class of service is significant. Although this fact is more fully developed in the discussion of Mr. Lewis' Tables Nos. 12 and 13, following, it may be noted here that rates for residence service in foreign countries, relatively to business rates, are much higher than in the United States, so that where a superficial analysis might indicate, in some cases, that the foreign business rates were somewhat lower than in the United States, a further analysis would

show the foreign residence rates in comparable exchanges to be much higher than in the United States. It is a matter of general knowledge that American residence rates are much lower than business rates; but in many foreign countries, for example in France, Switzerland, and Germany, there is no distinction between business and residence service. That this is a factor of great importance in rate comparisons is indicated by the fact that in American cities practically no residence subscribers pay an amount as high as the only rate available for government service in Paris (\$77.20), and that in Chicago there are more residence telephones than there are telephones of all kinds in the entire Paris exchange (95,000), and that some 140,000 of these Chicago residences pay a rate \$50 lower than the Paris rate.

2. A more serious error of omission on the part of Mr. Lewis is his failure to compare rates for any except large cities. Rates under government operation do not show a close adaptation of schedules to the cost and value of service, because, for one reason, the governments generally show little interest in the development of the service except in large cities, and, consequently, are inclined toward a standardization of one schedule for all exchanges, regardless of size or, at most, to have no more than two or three schedules. Thus, in Switzerland there is one schedule for all exchanges regardless of size; and although this has proved almost disastrous both to development and to the revenues, it does make possible the burdening of the smaller places for the advantage of the larger, where costs and values of service do not warrant subsidization.

The broad policy of the Bell Companies has been to afford telephone service in all parts of their territories; and their rates have been such as to develop the country districts as well as the urban communities. Although a broad study of foreign rates indicates that the government rates are relatively higher for residence service even in large cities (Paris and Brussels, for example) than in the United States, it is particularly true that in the great number of small places the rates in the United States are lower, even in actual currency, than in the foreign countries as a whole. A complete exposition of this fact is possible only in an extended discussion which would be necessarily technical in nature; but a comparison of the character of telephone development in the several countries will serve to indicate the essential correctness of this statement.

TELEPHONES PER ONE HUNDRED POPULATION IN URBAN AND RURAL TERRITORIES¹⁷

Country	Exchanges of over 100,000 Population	Exchanges of less than 100,000 Population	Per cent. Rural to Urban Development
Austria	2.6	.30	11.5
Belgium	1.8	.36	20.0
France	2.3	.47	20.4
German Empire	4.6	1.20	26.1
Great Britain ..	2.6	.75	28.8
Hungary	2.6	.25	9.6
Italy	1.2	.14	11.7
Netherlands ...	3.0	.74	24.6
Sweden	17.7*	2.46	13.9
Switzerland	6.0	1.85	30.8
Average of above Countries.	3.16	.67	21.2
United States	11.44†	8.17	71.4

*Due largely to private operation in Stockholm.

†Bell stations only included. The percentage is slightly in error for this reason.

From this table it is apparent that, poor as is the development in the larger European cities, even this development is attained at the expense of a far more impoverished rural development. In the light of telephone experience, this relative restriction of country service must be attributed chiefly to high rates for small exchanges, and perhaps, in part, to an inadequate service. This fact is corroborated by the statistics as to revenues per station earned by the government systems. In some cases the revenues per station are considerably *higher* than those of the Bell System, although in view of the cheaper labor, absence of tax burdens, freedom from legal responsibility, and the really very small exchanges in large cities, they should be expected, as a whole, to be very much less than in the United States. The facts concerning the actual exchange service revenues per telephone of the various government systems where there is no private operation are as follows:

AVERAGE EXCHANGE REVENUE PER TELEPHONE**

Country.	Exchange Revenue per telephone.
Austria, 1912.....	\$ 4.95
Belgium, 1911.....	39.05
France, 1912.....	28.61
German Empire, 1911.....	22.69
Great Britain,* 1912.....	32.60
Hungary, 1912.....	30.81
Switzerland, 1912.....	18.43
New Zealand, 1912.....	24.44
Australia, 1912.....	28.53
Average for Foreign Countries..	\$26.82
Bell System, 1912.....	\$30.93

*Not including municipal systems.

In Belgium and Great Britain the exchange revenues per telephone exceed those of the Bell System; and that of Hungary is about equal to that of the Bell System, so that no special comment is needed as to their rates. With reference to the other countries, however, whose average revenues appear to be lower than those of the Bell System, there are several important but simple factors involved, which will be made clear below. One of the chief considerations is that of the size of the exchange operated. As stated previously, it is generally well known that rates in large exchanges are necessarily higher than those for small exchanges. Unbiased evidence of this is given in the fact that the government rates in large exchanges are higher than in small exchanges, despite the governmental tendency toward inflexible rate systems. Thus the rates in London are higher than elsewhere in Great Britain; those in Christiania are higher than those in other Norwegian exchanges; those in Paris higher than those in other French cities; and so on. Hence, it would logically be expected that the average revenues per station in countries having a small number of large exchanges would properly be less than in a country having a large number of large exchanges, other things being equal. With this in mind it is important to note that none of these countries have more than a few exchanges of any considerable size, whereas the Bell has many such exchanges. The significance of this fact may be more clear from the following table:

Country	No. of Exchanges of more than 5,000 Telephones	Largest Foreign Exchange	No. of Bell Exchanges Larger than Largest Foreign Exchange
Austria ¹⁷⁵	2	Vienna	9
France ¹⁷²	4	Paris*	5*
German Empire ¹⁷³	35†	Berlin	3
Switzerland ¹⁷⁴	4	Zurich	46
New Zealand ¹⁷⁵	1	Auckland	86
Bell System‡.....	96	.....	..
Australia—No information obtainable.			..

*In every one of the five American exchanges larger than Paris, the average revenue per telephone is considerably less than the minimum rate in Paris.

†There are only three exchanges in Germany with more than 30,000 telephones, as against 24 in the Bell System.

‡Cities of more than 50,000 population only are used. There are several small cities with more than 5,000 telephones.

In addition to the above, it should also be noted that there are 2,852,907 telephones in the Bell System exchanges in cities in the United States of more than 50,000 population. This is more than all the telephones in all the countries for which revenue statistics are shown above; yet, despite the fact that the Bell System carries this large number of telephones in large exchanges, where the expenses of operation are much higher, the average revenue per station of the Bell System is only about \$4 higher than the average of all the countries named, in absolute currency values.

3. Although a comparison of the telephone rates of government systems and of those of the Bell System, as given above, shows that the Bell rates are not higher than those of the governments in terms of currency, the full significance of this fact lies in the consideration, not only that the Bell System has developed both the large and the small exchange business, but also that the service is far more adequate in scope and quality than in the government systems. The facts

concerning the quality of service cannot be stated in statistical terms except on the basis of scientific service observations which are not obtainable for foreign countries; but the facts concerning the adequacy of the service are more fully known.

Of these facts the most significant in relation to rates are those concerning the hours of service. It has already been shown, page 29, that the hours of telephone operation in the great majority of the exchanges of New Zealand, Switzerland, Sweden, and Belgium are so short as to impose serious limitations on the emergency value of telephone service in all except ordinary business hours, and, except in a few exchanges, to limit the use of the telephone during evening and night hours and on Sundays and holidays. Although the information concerning this factor in rates and service, in New Zealand, Switzerland, Sweden, and Belgium, will serve to indicate the general conditions of foreign service, it is important to note, for completeness, that similar conditions are found in Austria, Germany, France, Great Britain, and Australia. This statement is based on the following general information:

Austria: "As a rule, the hours of offices (telephone exchanges) conform to those of the telegraph offices. Centrals with more than 100 main stations (i. e., subscribers) have at least full day service (in summer from 7 a. m., in winter from 8 a. m., to 9 p. m.)."¹⁵⁹ This statement is significant in view of the facts that only 1.2% of the government telegraph offices are open all day and all night, and that only 8.4% of such offices have complete or prolonged day service.¹⁵⁴

Germany: As mentioned above, a charge is made in all German exchanges for night telephone calls. Since not all exchanges are open at night, rates are also quoted for connecting two subscribers' lines continuously during the hours when the central offices are not operated; or for giving a continuous connection during the hours when the subscriber's central office is not operated, with some distant central office that will be open during such hours.¹⁶⁰

In this connection, it should be noted that even in places of 30,000 inhabitants, service is not given after 9 p. m., and, although the people complain of this, the government does not act. Herr Wendel, in the Reichstag on February 21, 1913, described the condition in the following words (translation):

"I cannot forego to speak here about the wish expressed by one of our Electoral Districts. I refer here to Freiburg. There the entire telephone service is interrupted at 9 o'clock p.m. Five minutes after 9 o'clock it is impossible to obtain a telephone connection. Now the Town Council of Freiburg has addressed the Postal Administration and asked for the introduction of night telephone service. The Postal Administration has refused the request. It is true that Freiburg is a very pretty, idyllic, and quiet town, and I am glad of it; moreover, the night is not man's friend. I admit this; but it must also be remembered that not all citizens of Freiburg go to roost with the chickens, and a sudden sickness, accident, fire—any kind of trouble—may require a quick telephone call for a physician, or for a fire brigade, just as much after 9 o'clock p.m. as prior to that time. It seems to me indefensible that a city of some 30,000 inhabitants should be deprived of telephone service at 9 p.m., and it is the duty of the Postal Administration to get quickly in touch with the Postal Direction of Freiburg or the Upper Postal Direction of Dresden in order that this justifiable request of the inhabitants may be granted."¹⁶¹

Even in the day time, in many instances, the German telephone service is discontinued. Kraetke, Secretary of State for the Imperial German Post Office, with reference to this inadequacy of the German service, spoke as follows in the Reichstag on February 21, 1913 (translation):

"I have listened to the wish that our telephone exchanges should also be kept open during the noon hours. I wish to state that the various authorities have been instructed to exert themselves along this line. In accordance with the reports which are before me, I can state that 70% of all our telephone exchanges give service between 12 m. and 1 p.m. In this connection it has also been stated that it is a mistake that neighboring exchanges stop service at various noon hours. I have also asked the various Telephone Directions to consider this request, as otherwise our telephone exchanges are not as valuable to the people as they might be."¹⁶²

Great Britain: There are many exchanges in small places which do not have continuous day and night service, the break of service being from 10 p. m. to 4 a. m. or 5 a. m.¹⁶²

France: Small exchanges are closed two hours at noon, after seven o'clock at night, and after ten o'clock in the morning on Sunday.¹⁶³ In some of the larger places like Limoges (population 92,000) all night telephone service is given, but only because the Chamber of Commerce pays for the expense, which it meets through subscriptions from the municipality, from newspapers, and from the general public.¹⁶⁴ Nîmes (population 80,000) has no telephone service after midnight.¹⁶⁴

Australia: "Hours of Attendance. When the revenue from subscribers' lines and services connected to any exchange is less than at the rate of £150 per annum, attendance at that exchange shall be given only during the hours for which the office in question is usually open for the transaction of public business * * *."

"In calculating the revenue for the purpose of this regulation * * * revenue from any trunk line connected with the exchange shall not be included."¹⁰⁵

4. Although a study of the foreign rates shows that the rates of the Bell System are, on the whole, lower than those of the foreign governments, a comparison of rates in terms of currency values is not fully significant; for the purchasing power of money in the several countries varies to such an extent that absolute rates do not indicate the comparative availability of the service to the public. An attempt to equate exactly the telephone rates of the various countries in terms of the purchasing power of the charges is practically impossible, but for purposes of comparing real telephone rates, an equation based upon the wages paid to operators should be significant and approximately correct, especially since the wages of operators constitute a very large part of the cost of telephone service. In the following table, the exchange revenues per station are equated on the basis of the wages of switchboard operators in the principal cities of each country after three years' service:

THE REAL AVERAGE EXCHANGE REVENUES PER STATION IN TERMS OF EQUIVALENT AMERICAN DOLLARS.¹⁰⁶

Country.	Real average exchange revenue
Austria	\$75.60
Belgium	114.80
France	63.60
German Empire	49.40
Great Britain	59.30
Switzerland ...	27.50
Bell System	\$30.93

5. The facts concerning foreign telephone rates, all things considered, disclose that the rates of the Bell System are lower than those in foreign countries. In three cases (Switzerland, Australia, and New Zealand), however, it has not been made clear that this is true, although a consideration of the very small exchanges operated in these countries obviously warrants the opinion that the differences in rates are properly to be expected. However, in the case of Switzerland, where the equated revenues are \$27.50 per station as against \$30.93 for the Bell System, it may be noted that there is a deficit of about 14% in the telephone service, so that the true rate is about \$31.35 per station, and therefore higher than that of the Bell System. (See Appendix D.)

In the cases of Australia and New Zealand, statistics as to wages have not been available, but it is generally supposed that the price levels in these countries and in the United States are approximately the same. The Australian service, however, results in a deficit of about 25% (see Appendix D), so that the cost per telephone for exchange service is about \$35.67 as against the nominal average revenue of \$28.53, and the average of the Bell System of \$30.93.

In New Zealand, the average telephone rate is, of course, low assuming that the wage level is equal to that in the United States, and making due allowance for the extremely small average size of the exchanges operated; but these rates cover a telephone service probably more restricted as to hours of operation than in any country in the world, the average length of hours of operation probably being less than ten hours per day.

Mr. Lewis' Comparison of Rates in Competitive and Non-Competitive Exchanges.

In connection with his discussion of exchange rates, Mr. Lewis presents the following tables, said to have been provided by a competitor, concerning Bell rates with and without competition, and purporting to show that the Bell rates without competition are much higher than under competition:

MR. LEWIS' TABLE NO. 12.

A rival of the Bell system gives the following table of comparative rates before, during, and after competition, presumably flat rates:

City.	Bell rate before competition.	Bell rate during competition.	Bell rate after competition wiped out or Bell found it impossible to kill competition
Richmond, Va...	\$72	\$12	\$72
York, Pa.....	72	15	48
San Jose, Cal...	60	30	60
Dubuque, Iowa...	48	24	48
Winona, Minn...	48	12	48
Savannah, Ga...	36	18	36
Mobile, Ala.....	64	18	48
Lynchburg, Va...	65	12	48
Roanoke, Va.....	30	30	48
Norfolk, Va.....	40	40	60
Oswego, N. Y...	45	30	36
Kenosha, Wis...	30	30	42
Iowa City, Iowa...	42	24	36
Tampa, Fla....	30	30	54
Average rate.	\$49	\$23	\$49

MR. LEWIS' TABLE NO. 13.

Postal telephone rates, like mail rates, are uniform for similar services. The following table of the same rival gives the rates of the Bell system for some 60 cities, graded from the highest to the lowest populations. The letter (c) indicates competition. The depressing influence of competition on the rates is obvious:

No.	City.	Population.	Rate.
1	New York, N. Y....	2,331,542	\$228-a
2	Chicago, Ill.....	2,185,283	84-c
3	Philadelphia, Pa....	1,549,008	90-c
4	St. Louis, Mo.....	687,029	78-c
5	Boston, Mass.....	670,585	125
6	Cleveland, Ohio....	560,663	72-c
7	Baltimore, Md.....	558,485	174-b
8	Pittsburgh, Pa.....	533,905	80-c
9	Buffalo, N. Y.....	423,715	72-c
10	San Francisco, Cal...	416,912	180
11	Cincinnati, Ohio....	364,463	100
12	Washington, D. C...	331,069	168
13	Los Angeles, Cal....	319,198	63-c
14	Seattle, Wash.....	237,194	90
15	Indianapolis, Ind....	233,650	54-c
16	Providence, R. I....	224,326	80
17	Rochester, N. Y....	218,149	48-c
18	Denver, Col.....	213,381	138
19	Portland, Ore.....	207,214	72-c
20	Toledo, Ohio.....	168,497	48-c
21	Oakland, Cal.....	150,174	84
22	New Haven, Conn...	133,605	84
23	Memphis, Tenn.....	131,105	48-c
24	Scranton, Pa.....	129,867	42-c
25	Richmond, Va.....	127,628	72
26	Hartford, Conn....	98,915	84
27	Trenton, N. J.....	96,815	36-c
28	Springfield, Mass...	88,926	63
29	Wilmington, Del....	87,411	46-c
30	Des Moines, Iowa...	86,368	60
31	Norfolk, Va.....	67,452	60
32	Savannah, Ga.....	65,064	36
33	Portland, Me.....	58,571	60
34	Johnstown, Pa.....	55,482	30-c
35	Altoona, Pa.....	52,127	30-c
36	Springfield, Ill....	51,678	36-c
37	Mobile, Ala.....	51,521	48
38	Springfield, Ohio...	46,921	36-c
39	York, Pa.....	44,750	48
40	Sacramento, Cal....	44,696	72
41	Berkeley, Cal.....	40,434	84
42	San Diego, Cal....	39,578	48-c
43	Dubuque, Iowa.....	38,494	48
44	Tampa, Fla.....	37,782	54
45	Roanoke, Va.....	34,874	48
46	Jackson, Mich.....	31,433	30-c
47	Decatur, Ill.....	31,140	30-c
48	Lynchburg, Va.....	29,494	48
49	San Jose, Cal.....	28,946	60
50	Newport, R. I.....	27,149	60
51	Fresno, Cal.....	24,892	60
52	Everett, Wash.....	24,814	48-c
53	Burlington, Iowa...	24,324	72
54	Alameda, Cal.....	23,383	84
55	Oswego, N. Y.....	23,368	36
56	Stockton, Cal.....	23,253	60
57	Kenosha, Wis.....	21,371	42
58	Winona, Minn.....	18,583	48
59	Helena, Mont.....	12,515	60-c
60	Iowa City, Iowa...	10,091	63

NOTE (a): Limited to 5,700 calls; Manhattan district only. NOTE (b): Limited to 5,400 calls.

Twenty-four cities, averaging 342,486 in population, pay an average rate of \$53 under competition, while the remaining 36 cities, averaging 188,629 in population, without competition, pay \$81. Even where competition is absent there does not appear to be any rational order of rates. Stockton, Cal., with 23,253 population, pays the same rate (\$60) as Des Moines, Iowa, with 86,368, and pays twice as much as Johnstown, Pa., with 55,482 population, and only \$24 less than Chicago, Ill., under competition.

Mr. Lewis' conclusions from a study of these tables are apparently: (1) that Bell rates are exorbitant where there is no competition; and (2) that there is an unjustifiable lack of uniformity in Bell rates, whereas postal rates are uniform for the same service. With reference to Table No. 12, it should be noted:

1. The table is directly mendacious in that the columns showing Bell rates "before competition" and Bell rates "after competition wiped out, or Bell found it impossible to kill competition," are for the highest grade of business service; whereas the rates shown in the column "Bell rate during competition" are in no case, except for Kenosha, Wisconsin, rates for the highest grade of business service, but are in most cases for a lower grade of residence service; and in some cases, like York, Savannah, and Norfolk, the rate stated has not been quoted for any kind of service. The rates given as in effect before and after competition are in several instances incorrect. In the column "before competition" the rates shown for Norfolk and Savannah were not quoted for any class of service, and the rate shown for Winona was quoted for a party line service. In the column "after competition wiped out, etc.," the rate shown for Norfolk was for individual line flat rate business service, while individual line message rate business service was available at \$24.00 less per annum; the rate shown for Savannah was a residence rate; and the rate shown for Winona was not quoted for any class of service.

2. The rates of the following exchanges named have been decreased, instead of increased, after competition has ceased:

Richmond, York (still competitive), San Jose, Dubuque, Savannah, Mobile (still competitive), Lynchburg, Oswego, and Iowa City. Rates have been increased by the Bell Company in no case, with the possible exception of Winona.

3. Such reductions as have been made in rates after the introduction of competition have, in most cases, been similar to those made at about the same period in non-competitive exchanges.

4. The statistics given by Mr. Lewis are not only incorrect as quoted in these instances, but the inferences which he draws or wishes drawn are not justified in general. A study of the rate history in exchanges where former competition has ceased, in places of more than 10,000 population, shows the following:

BELL RATES AFTER CESSATION OF COMPETITION.

	No. of Exchanges.	% of Exchanges.
No change in rates....	47	51
No increase in rates in 3 years.....	3	3
Rates decreased	30	32
Rates increased within 3 years.....	13	14
Total	93	100

The above statistics cover exchanges where competition ceased prior to 1913. The total number of such exchanges in places of more than 10,000 population is about 140, and those eliminated in compiling the above table were not used because of no record, incomplete record, Bell exchange sold, or facts of doubtful interpretation.

With reference to Table No. 13 it should be noted:

1. That the rates quoted purport to be the Bell rates for individual line business service; but the rates quoted are not Bell rates for such service in the following instances: Chicago, Philadelphia, Cleveland, Minneapolis, New Orleans, Denver, Memphis, Dayton, Spokane, Trenton, Wilmington, Springfield, O., San Diego, Jackson, Decatur, and Burlington.

2. The rates compared are those for flat rate, mixed flat and message rate, and exclusively message rate exchanges. Mr. Lewis admits that a comparison of flat rate and message rate schedules is incorrect and misleading.

3. The exchanges are apparently compared on the basis of population and not on the basis of the number of telephones served. The following statistics will indicate how misleading the comparison is in this respect:

STATEMENT ILLUSTRATING COMPARATIVE SIZE OF EXCHANGES ASSOCIATED IN THE COMPARISON.

Development Statistics as of January 1, 1913.

COMPETITIVE RATES.			COMPARED WITH—	
City.	Company.	No. Telephones.	No. Telephones.	City.
Chicago	Bell	308,177		
	Ind.†	21,000		
Philadelphia	Bell	133,523		
	Ind.†	21,000	366,596	....New York (Manhattan and part of Bronx)
Buffalo	Bell	32,231		
	Ind.†	18,000	107,702	....San Francisco
Indianapolis	Bell†	28,000		
	Ind.†	14,000*	35,365	....Denver
Rochester	Bell†	14,010	44,410	....Seattle
	Ind.†	14,000	26,250	....Providence
Memphis	Bell	11,575		
	Ind.†	3,000	40,267	....Oakland×
Scranton	Bell†	10,661	16,022	....New Haven
	Ind.	3,000	17,939	....Syracuse
			12,891	....Birmingham
			16,180	....Richmond, Va.
Trenton	Bell	7,447		
	Ind.†	3,000	14,819	....Hartford
Wilmington	Bell	9,255	15,502	....Springfield, Mass.
	Ind.†	3,000	16,074	....Des Moines
Johnstown	Bell†	2,015		
	Ind.†	5,500	9,908	....Portland, Me.
Springfield, O.	Bell‡	5,750		
	Ind.‡	4,000	40,267	....Berkeley×
Everett	Bell†	2,167‡		
	Ind.†	2,200	40,267	....Alameda×

*Includes Broad Ripple.

†Indicates the exchanges, the rates of which are used in the comparison.

‡Bell rate, \$48.00; Independent rate not known.

‡As of October 1, 1912.

×Oakland, Berkeley, and Alameda constitute one exchange.

5. In comparing rates in message rate cities, the maximum quoted message charge is used. This is grossly misleading, since less than one per cent. of the subscribers pay the maximum quoted message charge, or more, in any exchange. It would be more significant to quote the minimum message charge, since from 30% to 50% of the development in a given class of service is secured at the minimum rate. In this connection the following comparison is significant:—

**RATES FOR INDIVIDUAL LINE BUSINESS SERVICE, AS QUOTED IN CERTAIN
COMPETITIVE CITIES, AND THE MAXIMUM AND MINIMUM RATES FOR
THE SAME CLASS OF SERVICE UNDER MESSAGE RATE SCHED-
ULES IN THE NON-COMPETITIVE CITIES.**

COMPETITIVE		NON-COMPETITIVE (City Service and All-Branch)		
City.	Rate Quoted.	City.	Maximum Rate.	Minimum Rate.
Chicago	\$84.00	New York	\$228.00	\$48.00
Philadelphia	90.00	Baltimore	174.00	39.00
Cleveland	72.00	San Francisco	180.00	60.00
Buffalo	72.00	Washington	168.00	39.00
Los Angeles	63.00	Cincinnati	100.00	48.00 (for local service only)
Indianapolis	54.00	Milwaukee	96.00	50.00
Rochester	48.00	Denver	138.00	48.00
Wilmington	46.00	Providence	80.00	40.00
San Diego	48.00	Springfield (Mass.) ..	63.00	39.00
		Sacramento	72.00	42.00

6. Rate schedules can be considered only as a whole, and specific rates cannot be compared for general purposes. The comparison quoted by Mr. Lewis contemplates the highest grade of service only, whereas the minimum rate for business, and particularly the minimum rate for residence service, are more important. The error of Mr. Lewis' comparison in this respect is shown by the following:—

**STATEMENT OF MINIMUM RATES IN CERTAIN CITIES WHERE MAXIMUM RATES
WERE SHOWN IN THE COMPARISON.**

COMPETITIVE CITIES.				NON-COMPETITIVE CITIES.		
City.	Company.	Minimum Rates.		Minimum Rates.		City.
		Business.	Residence.	Business.	Residence	
St. Louis	Bell† Ind.	\$36.00 60.00	\$24.00 24.00	\$36.00 30.00	\$24.00 21.00	..... Boston
Cleveland	Bell Ind.†	42.00 36.00	18.00 24.00	24.00	24.00	..... Baltimore
Buffalo	Bell Ind.†	42.00 36.00	24.00 24.00	12.00*	18.25	..... San Francisco
Los Angeles	Bell† Ind.†	36.00 36.00	18.00 18.00	30.00 36.50 27.37	30.00 18.25 18.25	..... Washington Cincinnati Milwaukee
Indianapolis	Bell† Ind.†	42.00 42.00	18.00 24.00	36.50	18.25	..... Denver
Rochester	Bell† Ind.†	42.00 40.00	24.00 24.00	54.00 27.38	24.00 18.25	..... Seattle Providence
Memphis	Bell Ind.†	48.00 48.00	30.00 30.00	48.00	18.00	..... Oakland
Wilmington	Bell Ind.†	36.00 46.00	24.00 21.00	48.00 39.00	24.00 25.00	..... Des Moines Springfield (Mass.)
San Diego	Bell Ind.†	42.00 42.00	18.00 24.00	42.00	18.00	..... Sacramento
Decatur	Bell‡ Ind.‡	30.00 30.00	18.00 18.00	27.00	12.00	..... Burlington (Ia.)

*Ready to serve charge. Messages 5c. each.

†Indicates the exchanges, the rates of which are used in the comparison.

‡The \$30.00 rate shown in the comparison is quoted by both the Bell and the Independent Companies for party line service.

It has not been possible to cover all the details of Mr. Lewis' Tables Nos. 12 and 13. To do this would require a long and technical discussion, not warranted in this paper because Mr. Lewis apparently does not attach much importance to the tables, so far as government ownership is concerned. However, in the brief analysis given, an attempt has been made to make clear that the statistics as to Bell rates and their history have been distorted before they reached Mr. Lewis' hands, and that any conclusions drawn therefrom would be absolutely erroneous. This analysis may be briefly summarized as follows:

1. The statistics used bristle with direct and absolute errors of vital significance.
2. Bell rates have not been increased as a result of the withdrawal of competition, but, in most cases, have either remained unchanged or have been decreased.
3. The comparison given in Table 13 includes both Bell and independent rates, although the Table purports to include only Bell rates.
4. The comparison in Table 13 cannot be significant because maximum rates only are quoted, because flat rates and message rates are compared, because the comparison is based upon population and not upon the number of telephones, because the rates of one class of service only are compared, because minimum rates are not considered, and because the most important element, residence rates, is disregarded.

Assumptions as to Toll Rates.

With reference to telephone toll rates, Mr. Lewis gives the following table of average toll receipts per toll message:

MR. LEWIS' TABLE NO. 14.
Average charge, interurban (toll) and long-distance.

Country.	Rate.
Luxemburg	\$0.030
Germany .....	.036
Switzerland .....	.074
Sweden .....	.079
France .....	.090
Japan .....	.100
Norway .....	.100
Great Britain .....	.120
Netherlands .....	.130
Italy .....	.190
United States (Bell Co.) .....	.190
Denmark .....	.230
Belgium .....	.230
Hungary .....	.260
Austria .....	.280

This table is greatly in error chiefly on account of the duplication in the counting of foreign toll messages, as explained on pages 27, 28; and because receipts from international messages must be divided between the systems over which such messages pass. On the basis of the duplicatory statistics—the only ones available for these foreign countries—the table is substantially correct, except as to Luxemburg and Germany, as might be surmised from the differences between Germany and Switzerland or Austria, adjacent countries.

In Luxemburg, of course, there is no toll or interurban service, since Luxemburg is merely a single exchange in itself. The figure Mr. Lewis uses can obviously be only a prorate from international business, or receipts from local exchange calls from public (pay) stations.

As to Germany, Mr. Lewis has evidently used the number of calls described in the "Journal Telegraphique" as "interurban" calls, amounting in 1911 to 377,262,940, or almost twice the corresponding number in the Bell System. The unsuitability of this figure for Mr. Lewis' purpose, though evident on the face of it, is explained in detail in a letter from the German Post Office, dated December 18, 1912, stating that this figure "includes conversations in suburban service, for which a toll charge is not made. I am very sorry that I cannot comply with your request to state the real number of interurban calls subject to special charge * * * as no special statistics on this point are available."

However, as the United States ranks with a lower revenue than Denmark, Belgium, Hungary, and Austria in this table, Mr. Lewis doubts its accuracy, not because of the very evident inconsistency between the figures for the foreign countries, but because he questions the accuracy of the Bell figure, which, however, includes the long distance service, without duplications either in revenue or in the count of messages, and which was, in 1912, \$ 204—less than Mr. Lewis shows for the four countries named. Nevertheless, for this reason, Mr. Lewis shows the following table of rates for toll service, intended to suggest that the toll rates of the Bell System are exorbitant:

MR. LEWIS' TABLE NO. 15.
Long-distance tariffs.

Country.	100 miles.	300 miles.	500 miles.	700 miles.
(a) Sweden.....	\$0.08	(a) \$.13	(a) \$0.20	(a) \$.34
(b) Norway.....	.09	(k) .24	(k) .36	(m) .38
(c) France.....	.10	(b) .34	(c) .38	(k) .48
(d) Italy.....	.19	(c) .35	(c) .38	(c) .58
(e) Belgium.....	.19	(m) .38	(c) .53	(g) 1.25
(f) Denmark.....	.20	(n) .38	(h) .60	(i) 1.26
(g) Japan.....	.20	(d) .38	(g) .82	..
(h) New Zealand.....	.24	(f) .40	(e) 1.50	..
(i) Great Britain.....	.24	(g) .50	..	..
(k) Germany.....	.24	(e) .62	..	..
(l) Australia.....	.32	(h) .72	..	..
(m) Austria.....	.38	(l) .80	..	..
(n) Hungary.....	.38	(i) .84	..	..
(o) Russia.....	.38	..	..	..
(p) United States (Bell Co.).....	.60	(p) 1.80	(p) 3.00	(p) 4.20

NOTE.—The letters preceding the name of each country are used to identify the countries to which the rates given for 300, 500, and 700 miles belong.

Table No. 15 is incorrect and misleading for the following reasons:—

1. In several instances there are important errors of fact.
2. The table does not take into account the shorter distances which are the more important.
3. The comparison does not take into account important differences in the methods of applying the unit charges.
4. The service given in the foreign countries is "two-number" service, whereas the service given in the United States is "particular person" service, the rates for which should not be, and are not, the same in any country where both types of service are given.
5. The comparison covers "ordinary" service only, whereas the Bell rates cover "urgent" or express service. This Mr. Lewis admits.
6. The comparison covers domestic service only, whereas a fair comparison should include international service.
7. The comparison does not take into account differences in the cost of construction and in operating wages.
8. The comparison does not take into account differences in costs due to differences in the character of service.
9. The comparison does not take into account the fact that toll service in foreign countries does not pay for its cost.

These more important considerations, in a comparison of foreign and American toll rates, are discussed in detail below:

1. ERRORS OF FACT.

In the cases of Norway¹⁶⁸ and France,¹⁶⁹ Mr. Lewis has confused kilometers with miles, the rates in both cases applying to 100 kilometers, or 62.1 miles, and not to 100 miles.

As to Austria, Mr. Lewis has shown a rate of 38 cents for all distances, whereas the rates are: 100 miles, \$.38; 300 miles, \$.61; 500 miles, \$.81.¹⁷⁰

In Sweden the rate for 500 miles is \$.27, not \$.20.¹⁷¹

In Denmark the correct rate for 300 miles is \$.54, not \$.40.¹⁷²

In Japan the correct rates for distances of 500 and 700 miles are \$.87 and \$1.12, respectively, and not \$.82 and \$1.25.¹⁷³

In New Zealand the rate quoted by Mr. Lewis for 500 miles must be incorrect, since it is lower than that which he quotes for 300 miles.¹⁷⁴

2. THE COMPARISON DOES NOT COVER SHORT DISTANCES.

The rates for the shorter distances are obviously and necessarily more important with reference to volume of traffic than those for the longer distances in every country, both because the rates for the longer distances are the higher, and because the natural social and economic interests are closest with nearby places. This is easily to be seen from Mr. Lewis' Table No. 14, where in most cases the average revenue per conversation is far below the rate for 100 miles.

3. METHODS OF APPLYING UNIT CHARGES

The American rates are for an initial period of three minutes. For longer conversations the rates, for each additional minute, are about one-third of the initial rate. The foreign rates are, in nearly all cases, as Mr. Lewis states, for an initial period of three minutes; but over-time is charged for at the initial rate for each additional three minutes or fraction thereof. This is a very important difference in rates, since a very considerable number of conversations extend beyond three minutes, but less than four minutes or five minutes.

4. FOREIGN RATES ARE FOR "TWO-NUMBER" SERVICE ONLY.

The rates which Mr. Lewis quotes for foreign countries are for a service generally known in the United States as "two number" service. Under this type of service, the subscriber orders connection with a specified telephone, either by giving the telephone number and exchange, or, in some cases, by giving the name of the subscriber and his exchange, in which case the designation of a subscriber by name is merely to aid in locating the particular telephone desired; and when that telephone is secured, regardless of who answers, the connection is established and the conversation is charged for from the time the telephones are connected. In the United States this type of service is given only for very short distances (usually not more than 20 miles).

The "particular person" service, which is the type of service in general use in the United States and which is the only service given beyond short distances, differs from the "two-number" service in that the calling subscriber orders arrangements for a conversation with a particular person; and no charge is made unless conversation is actually had with the specified person.

The differences in these types of service are exceedingly important in relation to rates; for in the case of "two-number" service, the calling subscriber pays for the time required to secure, or in attempting to secure the particular person desired; whereas no charge is made, under the "particular person" method, unless the person requested is obtained. Moreover, if the particular person desired is not available at the time and at the station called, the call is in very many cases useless to the subscribers calling, under the "two-number" method, although it must be paid for.

It is obvious that when the "particular person" method is used, a considerable amount of time on the part of operators, as well as a considerable amount of circuit time, is consumed in obtaining particular persons, so that the costs per call are higher. As to circuit use, this time is charged for as a part of the conversation under the two-number method, and under this method a part of the operator's work is transferred to the subscriber.

In some countries, for example, in France and Great Britain, there is no provision whatever for the handling of particular person calls. In other countries, for example, Sweden, Norway, Denmark, Germany, and Austria, a special charge is made for "particular person" service. A statement of these charges (varying according to distances covered) and their relation to the regular toll charge for three minutes follows:

*Norway*¹¹

Additional Charge for Particular Person. Cents.	Charge for Initial Period (Ordinary Rates). Cents.	Additional Charge to Charge for Initial Period.
1.34	4.0	*
2.68	6.7	20
2.68	9.4	28
5.36	13.4	20
5.36	20.1	27
5.36	26.8	20
5.36	33.5	17
5.36	40.0	13

*No "particular person" service.

*Sweden*¹¹

Additional Charge for Particular Person. Cents.	Charge for Initial Period (Ordinary Rates). Cents.	Additional Charge to Charge for Initial Period
6.7	4.0	167.0
6.7	8.0	84.0
6.7	13.4	50.0
6.7	20.0	33.5
6.7	26.8	25.0
6.7	33.5	20.0
6.7	40.0	17.0
6.7	47.0	14.0
6.7	53.6	12.5

Denmark. The charge for "particular person" service is 6.7 cents. The initial rates vary from 6.7 cents to 53.6 cents. The "particular person" rate is, therefore, from 100% to 12.5% higher than the two-number rate.¹⁷⁷

Germany. The charge for "particular person" service is 5.95 cents in addition to the regular rates. As the rates vary from 4.76 cents to 47.6 cents, the "particular person" rate is from 125% to 12.5% higher than the "two-number" rate.¹⁷⁸

Austria. The charge for "particular person" service is 6.1 cents in addition to regular rates. As the rates vary from 6.1 cents to 81.2 cents, the "particular person" rate is from 100% to 7.5% higher than the "two-number" rate.¹⁷⁹

In the United States the "particular person" rates are ordinarily 5 cents higher than the "two-number" rates at short distances (from 5 to 20 miles), and are from 30% to 20% higher than the "two-number" rate for longer distances in the few cases where "two-number" service (optional) is given.

It will be seen from the above that for distances up to 30 miles the "particular person" rate in Europe is about 100% higher than the "two-number" rate; and that for greater distances the "particular person" rate is not less than about 12% higher than the "two-number" rate. It is a fact that in comparing American toll rates with foreign rates, when no specific "particular person" charge is stated, an amount equal to 100% of the ordinary rate for the three minutes may be added with propriety for distances from 25 miles to 50 miles, and an amount equal to 25% should be added for greater distances.

Mr. Lewis' comparison is, therefore, misleading in that the rates compared are not for the same kind of service. In this connection it should be noted that for the longer distances in the United States, when both "particular person" and "two-number" service are given (for example, New York-Philadelphia), the very great majority of messages pass at the "particular person" rate, although it is 25% higher than the "two-number" rate. This will indicate roughly to what extent subscribers in France and Great Britain, for example, may be burdened with charges for unavailing calls under the "two-number" system (i. e., in cases when the particular person desired is not obtained after the connection is established).

5. THE COMPARISON COVERS ORDINARY SERVICE ONLY.

As in the case of the comparison of telegraph rates, Mr. Lewis has omitted the "urgent" or preferential foreign toll rates. His excuse for so doing is that there is no preferential rate in the United States—"the day charge is all the same and one has to wait his turn despite the rate." This is not true, because there is normally no waiting. The average time elapsing from the filing of the order for a long-distance conversation until the completion of the connection is not in excess of 5½ minutes; whereas the delay in foreign countries on "ordinary" conversations is often from one to several hours—in some cases "ordinary" conversations cannot be obtained except early in the morning or late in the afternoon. Facts concerning the delays in service in foreign countries are given on pages 47-49 following. It should be noted here, however, that Mr. Lewis should have based his comparison on the "urgent" rates of foreign countries, which apply to the only service which even approximates that given in the United States.

6. THE COMPARISON COVERS DOMESTIC RATES ONLY.

Again, as in the case of telegraph rates, Mr. Lewis has omitted any comparison of international rates, even in quoting the rates of countries so small in size that there are only a few, if any, long hauls except those which are international.

Mr. Lewis has, then, in his comparison omitted any factor compensating for the differences between "particular person" and "two-number" service; has omitted any indication of the differences in methods of charging for overtime; has omitted "urgent" rates; and has omitted international rates. A study of foreign domestic toll rates in which some of these factors are taken into consideration shows that, in terms of currency, the American rates are lower for short distances than the foreign ordinary rates; that they are lower than the foreign urgent rates at 25 miles; and are lower for four minute urgent conversations up to at least 100 miles. In view of the fact that the very heavy toll traffic normally and naturally is confined within radii

*This is the longest two-number service haul in effect in the United States.

of from 35 to 50 miles,* these facts are of great importance, for obviously the foreign governments could afford to carry long-distance traffic at great losses if the charges on the short distance traffic were unnecessarily high, which is clearly the fact. (See Appendix G.) Inasmuch as the international rates are higher than the domestic rates, it is obvious that for all hauls within a moderate distance the international rates must be very much higher than the American rates. Thus, the German domestic rate for "two-number" service up to 15 miles is about 5 cents; but for the same distance across the Austrian border it is about 12 cents, or about 140% higher.¹⁸² Similarly, the domestic rate in Belgium is 19.3 cents; but across the French border, even if the distance were only 5 miles, the rate would be increased to 29 cents (ordinary service), which will cover a conversation of from 35 to 45 miles in the United States.¹⁸² Again, the rate between border towns of France and Germany is about 24 cents.¹⁸² These rates are so clearly far higher than American rates for these short hauls that considering the natural volume of short haul traffic, the rates for long distances could be reduced to almost nothing, and the international toll service as a whole could still be profitable.

7. THE COMPARISON DOES NOT TAKE INTO ACCOUNT DIFFERENCES IN COSTS.

Mr. Lewis distinctly disclaims that any differences in prices of materials and labor should be taken into account, because it is his opinion that the prices of copper and poles are higher in Europe than in the United States by the cost of transportation to Europe; and because he believes that the cost of copper and poles are the chief items of toll plant cost. In this opinion Mr. Lewis is greatly in error, because pole timber in Europe is not imported from the United States, because the difference in the price of copper is only about 7 cents per 100 pounds, and because the cost of poles and copper constitutes only a part of the total cost of toll lines. The cost of copper and poles is only 45% of the total cost of toll lines in the Bell System and only 14% of the cost of total telephone plant. The remainder of the cost consists of labor expense and the cost of manufactured material, in which labor cost is a large element.

As is generally known, labor costs are much less in Europe than in the United States, so that it is fair to state that toll lines, when economically constructed, must cost less in Europe than in the United States. However, plant charges are not the only item in the cost of toll service, and for the shorter hauls the cost of operating labor and the charges on terminal plant constitute a very important item of cost; so that, particularly as to the shorter hauls, the cost of service generally corresponds to the wage level and the relative value of money.

A comparison of operators' wages is a fair index of relative costs, or of the value of money, and ought to be taken into consideration not only in connection with exchange rates but also in connection with toll rates. For this reason, the toll rates in various countries have been equated on the basis of relative operators' wages, as shown in Appendix E, and a comparison of equated toll rates given in Appendix G, Table II. This comparison shows clearly that the Bell toll rates are lower than the foreign *deferred* rates at least for distances up to one hundred miles; and that they are lower even at two hundred miles than the foreign rates for four minute conversations. When the comparison is made between the American rates and the foreign *preferred* rates, which do not cover a service as good as that given in the United States, it is found that the American rates are lower for *all distances*.

8. THE COMPARISON DOES NOT CONTEMPLATE DIFFERENCES IN CHARACTER OF SERVICE.

From a cost standpoint alone, a comparison of toll rates should take into account the differences properly assignable to variations in the character of toll service given. The importance of the difference between "two number" and "particular person" toll service, in comparisons of toll rates, has already been discussed; but a difference in the character of service, with respect to delays in completion of connections, is of equal if not of greater importance. The following are a few pertinent facts illustrating the character of government toll service:

*At least 75% of the toll traffic of the United States falls within this distance. This is true also of foreign countries. For example, in Switzerland over 70% of the toll traffic is of less than 30 miles haul.¹⁸¹

		Time from filing of long distance order to completion of connection.	
		Ordinary Messages	Preferred Messages
GREAT BRITAIN—DIRECT CIRCUITS.¹⁸⁷			
London-Paris	1 hour		
London-Birmingham	20 mins.		
London-Sheffield	30 mins.		
London-Nottingham	30-40 mins.		
London-Manchester	30-40 mins.		
London-Liverpool	15 mins.		
London-Glasgow	20 mins.		
London-Edinburgh	20-30 mins.		
London-Belfast	30-40 mins.		
London-Birmingham	30-40 mins.		
SWEDEN—DIRECT CIRCUITS.¹⁸⁸			
Stockholm-Malmö	45 mins.		45 mins.
Stockholm-Göteborg	2 hours		15 mins.
Stockholm-Luleå	2 hours		1 hour
Stockholm-Gothenburg	2 hours		1½ hours
GERMANY—DIRECT CIRCUITS.¹⁸⁹			
Berlin-Düsseldorf	10 mins.		
Berlin-Cologne	32 mins.		
Berlin-Frankfort	35 mins.		
Berlin-Paris	36 mins.		
			Preferred Service not stated.

^aThe lines are so occupied that ordinary conversations can be had only early in the morning or late in the afternoon.

The following quotation from a speech in the Reichstag confirms these statistics as to present conditions in Germany:

"Thus, complaint is made of the long time that a subscriber must wait in order to get long distance connections, especially connections between the West and the more central parts of the country, and in particular between Dusseldorf and Berlin. For years the Imperial Post Office has been acquainted with these complaints. In 1907 the Dusseldorf Chamber of Commerce made an investigation and found that the waiting time exceeded two hours. In 1910 it was proved that the average time of waiting to be connected by telephone service between Dusseldorf and Berlin* was still over one hour, and the average time between Dusseldorf and Mannheim, Dortmund, and Cologne was forty-four, thirty-nine, and thirty-four minutes, respectively. Later, conditions again grew worse. The average time required to get a connection with Berlin is now 1½ hours. According to reports from a number of firms if the operator be requested to get Berlin, the general reply is that unless the conversation is classified as 'urgent,' the connection will take several hours. In fact, the Administration recommends a scheme of 'urgent' conversations to overcome the trouble."¹⁹⁰

*About 400 miles.

DENMARK. Average waiting time for all lines (maximum distance 100 miles) 14¾ minutes.¹⁸⁷

FRANCE. Officially reported complaints of Chambers of Commerce concerning delays in toll service:¹⁸⁸

Chamber of Commerce of Alais (population 25,000):

"As regards telephone communications, for example, several business houses have reported that it has been impossible on several occasions to obtain connections with Marseilles (85 miles) and Lyons (115 miles), even after waiting four hours."

Chamber of Commerce of Chambéry (population 23,000):

"Telephone communications with Geneva (50 miles), Lyons (60 miles), Paris (280 miles), Grenoble (30 miles), are practically impossible during the greater part of the year, and it is necessary to wait hours for a connection. In the case of Paris, the connection is obtained the day after the call has been filed."

Chamber of Commerce of Rouen (population 125,000):

"At the head of the reforms which we would like to see realized we place the improvement of the telegraph service, and especially the improvement of the telephone service, which still leaves much to be desired. It takes an average of 55 minutes to secure a connection with Paris (70 miles)."

UNITED STATES. The average time required to complete a long distance connection on the lines of the American Telephone and Telegraph Company (unless the particular person desired cannot be located) is less than 6½ minutes from the time the subscriber files the order. On "two-number" service, the type of service given by all the governments, the average time between New York and Philadelphia is about 70 seconds.

The complaints of the Chambers of Commerce in France (only a few are quoted above) indicate very clearly the cause of the foreign delays, and the relation of the cause to the cost of service. These Chambers of Commerce state that the government does not establish enough circuits to carry the business promptly, and repeatedly urge the placing of an adequate number of circuits. In some cases, the Chambers of Commerce have actually paid the government the entire cost of placing additional circuits to handle the business, just as in the case cited hereinbefore public subscriptions were required to pay for night exchange service.

The great delays in foreign toll service are largely the result of insufficient plant. It is the policy and practice of the Bell Companies to establish plant in accordance with the requirements during the hours of heavy traffic, so that a rapid telephone service is given at all hours. This, of course, results in the limited use of costly circuits; whereas the foreign method, *if operating is equally efficient*, by spreading the traffic over a number of hours through enforced delay, results in a very high utilization of plant, but a very low efficiency of service.

9. TELEPHONE TOLL SERVICE DEFICITS.

Not only are the foreign toll rates higher than the American toll rates, but even with the really higher rates, the foreign toll service in many cases does not yield enough revenue to cover its cost. This is true at least of Switzerland, Bavaria, Australia, and New Zealand, as shown by the following facts:

SWITZERLAND. An official investigation has disclosed that in 1909 the toll service resulted in a deficit of 6% of the toll receipts.¹¹²

BAVARIA. The loss on the toll service of Bavaria was 250,000 marks in 1908. (See Appendix D.)

AUSTRALIA. Excepting the Sydney-Melbourne trunk line, the toll service of Australia produced a loss of £54,112 (about \$263,000) in the fiscal year ending June 30, 1913; and, including the Sydney-Melbourne service, about £51,325 (approximately \$250,000). This loss was equal to about 35% of the toll revenue.¹⁸⁹

NEW ZEALAND. The telegraph and toll telephone services combined result in a deficit of about 23% of the telegraph and toll revenues. (See Appendix D.)

C. AS TO THE SOCIAL INEFFICIENCY OR INADEQUACY OF PRIVATE TELEPHONE SYSTEMS.

Mr. Lewis states, in effect, that the deterrent influence of high rates has prevented a development of the telephone business in the United States and that this, in itself, results in lower efficiency of personnel than governments obtain. He therefore estimates that the government could secure an enormous increase in traffic with its, presumably, lower rates. It has been shown in the preceding pages that the efficiency of the American telephone service is not relatively low; that American rates for telephone service are, in fact, lower than those of the government systems; and it is now submitted that the American telephone service is the most fully developed and is the most adequate in the world. Mr. Lewis' ultimate proof of his contentions as to institutional efficiency and as to rates rests, as he affirms, on the relative development of the service. This test of Mr. Lewis' reasoning, and of his facts as well, is accepted not only for purposes of discussion, but as fundamentally sound; for it is a matter of experience in the telephone business, as in other businesses, that when rates are high or service is inefficient, the use of the service is restricted; and that when rates are low and service is efficient, the use of the service is high. The issue is, therefore, squarely joined on the facts concerning the relative development of telephone service under private ownership and under government operation. Mr. Lewis' only statistics directly bearing upon the development of telephone service are the following:

MR. LEWIS' TABLE NO. 16.

Number of toll conversations per phone

Country.	Number of conversations	Rank.
Denmark	761	1
Netherlands	634	2
Denmark (private).	348	3
Germany	301	4
Sweden	150	5
Russia	142	6
Norway	135	7
Switzerland	130	8
France	125	9
Norway (private).	109	10
Italy (private)....	73	11
Japan	69	12
Italy	62	13
United States (1912, Bell).	48	14
Belgium	44	15
Austria	37	16
Hungary	34	17

This comparison is intended to include what is known in the United States as "toll and long distance" conversations. It is in error for the following reasons:

1. The statistics of toll conversations are erroneous, because in Germany local trunked calls are included as "toll" and the Administration cannot give the statistics of toll messages; because in most foreign countries messages are counted by *rate periods* and not by actual conversations; and because international messages are counted twice. These errors are discussed in connection with Table No. 14, page 43.

2. Statistics of toll or interurban conversations cannot be significant as to the development of toll service when related to the number of telephones. It is obvious that the greater the development of local telephone service, the greater the proportion of subscribers of restricted means, and of subscribers whose social or business circles are naturally limited to relatively small spheres. When telephone service is largely confined, as it is in the government systems, to the merchants and larger houses and to the more prosperous residences, the number of toll conversations per telephone would be likely to be high as against that in a system where the telephone was used by small business houses and in residences of all classes. As will be shown below, the development in telephones is so much greater in the United States than in foreign countries that it might be expected, although this is not the fact, that the number of toll conversations per telephone in the United States would be lower than in those countries.

For these reasons it is more significant to state the number of toll messages per capita, and this method is analogous to Mr. Lewis' method of measuring telegraph traffic development and mail development.

With moderate allowance for duplication in counting messages in foreign countries, the inter-urban and long distance toll traffic in the several countries is as follows:¹⁹⁰

Country.	Population in Thousands.	Interurban Toll Conversations Per Capita.
Austria	29,056	.17
Belgium	7,570	.26
Denmark*		
France (1911).....	39,601	.71
German Empire†.....	.....	..
Great Britain	46,122	.78
Hungary (1911).....	21,050	.09
Italy (1910).....	34,452	.10
Netherlands	6,078	.82
Norway	2,422	3.74
Sweden	5,604	3.25
Switzerland	3,841	2.58
New Zealand	1,071	.61
<div style="display: flex; align-items: center;"> <div style="flex: 1;"> </div> <div style="font-size: 3em; margin: 0 10px;">}</div> <div> Maximum possible. Obtained by dividing toll revenue by the minimum rate. </div> </div>		
Australia	4,669	.70
United States.....	96,299	3.36

*Denmark not included, as it is believed that, in addition to the ordinary European "padding" by using rate periods and counting inward and transit international messages, there is the same type of duplication in counting messages between the private companies, and between the private systems and the government system, and between two companies over the government system. There is no doubt, however, that, due to the development by private companies, the traffic is higher than elsewhere in Europe.

†The Administration states that no figure can be given and that those quoted in the "Journal Télégraphique" include free inter-office trunk calls in suburban traffic—in addition to duplications in counting.

It will be seen from the above that with the most conservative corrections in the foreign statistics, and with a moderate estimate of traffic for non-Bell Companies in the United States, the development of toll traffic in the United States is exceeded only by that of Norway, where the statistics as to private companies and the state system may be subject to duplication. Probably the development in Denmark approaches that in the United States. It should be noted, however, that the only countries in which the development of interurban toll traffic is approximately as high as that of the United States are those in which a very large part of the telephone business is conducted by private companies—in Norway, Sweden, and Denmark.

Not only is the development of interurban toll and long distance traffic in the United States higher than that under exclusively government operation, but the development of the local service, which is relatively of much greater importance in the United States, is not even approached in any other country of the world. Mr. Lewis has given no statistics as to local telephone development; but his conclusions as to institutional efficiency and as to local rates are most conclusively proven in error by local development statistics.

There are two ways of showing the development of local service: first, to state local traffic in relation to population; and, second, to state the number of telephones in relation to population. The first method indicates the actual use made of the telephone, but does not properly account for the important factor of emergency service. The second shows, in a general way, the utility of the telephone to the people, including its emergency or "insurance" service, without directly indicating its actual use in messages. Both methods of indicating local telephone development should be used in order to give a complete statement of the facts.

Statistics as to total telephone traffic have been given in connection with the discussion of Mr. Lewis' Table No. 6, page 21. Inasmuch as the interurban traffic per capita, as shown above, is small, for general purposes a statement of total telephone traffic per capita will indicate the development in local traffic. For this reason, the statistics given hereinbefore as to total telephone traffic per capita are repeated below:

Country.	Operated by.	Traffic per Capita. % of U. S.	
United States.	Private	161.99	100.0
Denmark	Private*	81.24	50.0
Sweden	Gov. and Private	77.47	47.8
Norway	Gov. and Private	70.00	43.2
Germany	Government	34.89	21.5
Netherlands .	Government†	27.92	17.2
Great Britain.	Gov. and Mun.	23.81	14.7
Luxemburg ..	Government	18.45	11.4
Belgium ..	Government	18.23	11.2
Switzerland ..	Government	17.85	11.0
Austria	Government	12.55	7.1
Italy	Gov. and Private	9.93	6.1
Hungary	Government	9.59	5.9
France	Government	8.36	5.2

*Less than 2% of local operation is government.

†Including municipal. There is a small amount of private operation.

No statistics are published for New Zealand.

In Australia the development in 1910 was about 40 per capita; but since then exclusively message rate schedules have been adopted in all exchanges, so that it is probably much less than 40 at the present time.

These statistics of traffic development require no special comment, except that the foreign statistics are very greatly inflated, as is clearly shown hereinbefore, pages 27-29. In passing, it may be noted that the development in the United States is more than four times that of any country in which there is exclusively government operation. It is, of course, a matter of conjecture as to what the development in Denmark would have been if private concerns had been permitted to establish a complete system.

Although the statistics of traffic development are very significant in connection with Mr. Lewis' general argument, those of station (i. e., telephone) development are even more so. These are shown below in two tables, the first giving the general development by countries; and the second, giving the relative development in some of the principal cities of the world.

TOTAL TELEPHONES IN SERVICE AND NUMBER OF TELEPHONES PER 100 POPULATION IN VARIOUS COUNTRIES, JANUARY 1, 1913.¹⁰¹

Country.	Operated by.	Telephones.	Telephones per 100 Population.	% of U. S. Development
United States.....	Private	8,975,074	9.1	100.0
Denmark	Private*	118,398	4.2	46.2
New Zealand	Government	42,934	4.0	44.0
Sweden	Gov. and Private	217,554	3.9	42.9
Norway	Gov. and Private	75,000	3.1	34.1
Australia	Government	121,020	2.6	28.6
Switzerland	Government	90,573	2.3	25.3
Germany	Government	1,302,672	1.9	20.9
Great Britain	Government	738,738	1.6	17.6
Luxemburg	Government	3,910	1.5	16.5
Netherlands ..	Government†	77,195	1.3	14.3
Belgium	Government	58,640	0.8	8.8
France	Government	293,195	0.7	7.7
Austria	Government	161,230	0.5	5.5
Hungary	Government	75,738	0.4	4.4

*Some government operation.

†Some private operation. Largely municipal.

STATEMENT SHOWING COMPARATIVE TELEPHONE DEVELOPMENT
IN PRINCIPAL CITIES IN THE UNITED STATES AND IN OTHER COUNTRIES
JANUARY 1, 1913.

UNITED STATES.			OTHER COUNTRIES. ¹²²			
City.	Population.	Bell Telephones per 100 Population.	Total Telephones per 100 Population.	Population.	City.	Operated by.
New York, N. Y.....	5,270,000	9.2	3.4	7,280,000	London	Government
Chicago, Ill.....	2,358,000	13.1	3.2	2,940,000	Paris	Government
Philadelphia, Pa.....	1,614,000	8.3	6.2	2,320,000	Berlin	Government
Boston, Mass.....	1,417,000	11.0	2.7	2,115,000	Vienna	Government
St. Louis, Mo.....	825,000	7.5	3.6	1,150,000	Glasgow	Government
Pittsburgh, Pa.....	788,000	8.2	5.9	1,207,000	Hamb'g-Altona	Government
Baltimore, Md.....	623,000	8.2	2.8	880,000	Budapest	Government
Cleveland, Ohio.....	620,000	8.3	2.6	839,000	Brussels	Government
Cincinnati, Ohio.....	582,000	9.8	5.5	606,000	Munich	Government
Detroit, Mich.....	541,000	12.9	4.6	617,000	Leipzig	Government
			8.4	608,000	Copenhagen	Private
			4.3	558,000	Dresden	Government
			1.4	565,000	Marseilles	Government
			3.5	537,000	Breslau	Government
			1.3	547,000	Lyons	Government
			1.6	487,000	Antwerp	Government
San Francisco, Cal.....	454,000	23.7	1.5	340,000	Liege	Government
Milwaukee, Wis.....	414,000	10.5	3.2	308,000	Chemnitz	Government
Washington, D. C.....	345,000	13.7	22.8*	351,000	Stockholm	Gov. & Priv.
Denver, Col.....	222,000	15.9	2.0	243,000	Trieste	Government
Portland, Ore.....	255,000	15.3	1.0	292,000	Ghent	Government
Omaha, Neb.....	166,000	20.1				

*Of which 70 per cent. is that of the Stockholm Telephone Company which competes with the government and does not have connection with the government long distance lines.

It should be noted in connection with the above statistics, that the development in Stockholm and Copenhagen compares very favorably with that in the various American cities. This fact refutes the argument that the difference in American and European development is due to differences in the commercial and social character of the people in the United States and in the foreign countries; and indicates that under progressive commercial management the telephone could be as widely used in Europe as in the United States.

It should be further noted that in Europe, under government management, the larger cities are comparatively well developed, whereas the country districts and smaller cities have very little development. In the United States the large cities have not been developed at the expense of a general telephone development.

A somewhat more significant statement of urban telephone development is contained in the following table in which cities of more than 300,000 population in Northwestern Europe and the United States are listed in the order of telephone development:

TELEPHONE DEVELOPMENT IN CITIES OF MORE THAN 5000 POPULATION IN THE UNITED STATES AND NORTHWESTERN EUROPE, ARRANGED IN ORDER OF DEVELOPMENT.

JANUARY 1, 1913*

City	Telephones per 100 Population†	Owned by	Country
San Francisco	28.7	Private	United States
Stockholm	22.8	Gov. & Private†	Sweden
Stockholm	15.9	Private only	Sweden
Los Angeles	14.0	Private (Bell only)	United States
Washington	13.7	Private	United States
Chicago	13.1	Private (Bell only)	United States
Detroit	12.9	Private	United States
Boston	11.0	Private	United States
Minneapolis	10.6	Private (Bell only)	United States
Milwaukee	10.5	Private	United States
Cincinnati	9.8	Private	United States
New York	9.2	Private	United States
Copenhagen	8.4	Private	Denmark
Philadelphia	8.3	Private (Bell only)	United States
Cleveland	8.3	Private (Bell only)	United States
Pittsburgh	8.2	Private	United States
Baltimore	8.2	Private	United States
Kansas City	8.1	Private (Bell only)	United States
Charlottenburg	8.1	Government	Germany
St. Louis	7.5	Private (Bell only)	United States
Buffalo	7.1	Private (Bell only)	United States
Stockholm	6.9	Government (only)	Sweden
Stuttgart	6.5	Government	Germany
Newark (N. J.)	6.2	Private	United States
Berlin	6.2	Government	Germany
Frankfort	6.1	Government	Germany
Hamburg-Altona	5.9	Government	Germany
Munich	5.5	Government	Germany
New Orleans	5.1	Private	United States
Hanover	4.7	Government	Germany
Leipzig	4.6	Government	Germany
Cologne	4.3	Government	Germany
Dresden	4.3	Government	Germany
Dusseldorf	4.2	Government	Germany
Nuremberg	4.0	Government	Germany
Hull	4.0	Gov. & Municipal (1913)	Great Britain
Jersey City	3.8	Private	United States
Glasgow	3.6	Government	Great Britain
Breslau	3.5	Government	Germany
Edinburgh	3.4	Government	Great Britain
London	3.4	Government	Great Britain
Essen	3.4	Government	Germany
Liverpool	3.2	Government	Great Britain
Chemnitz	3.2	Government	Germany
Paris	3.2	Government	France
Rotterdam	2.9	Municipal	Netherlands
Budapest	2.8	Government	Hungary
Vienna	2.7	Government	Austria
Bradford	2.7	Government	Great Britain
Amsterdam	2.7	Municipal	Netherlands
Brussels	2.6	Government	Belgium
Plymouth	2.5	Gov. & Municipal	Great Britain
Manchester	2.5	Government	Great Britain
Bristol	2.1	Government	Great Britain
Leeds	2.1	Government	Great Britain
Dublin	2.0	Government	Great Britain
Newcastle	2.0	Government	Great Britain
Nottingham	2.0	Government	Great Britain
Belfast	1.7	Government	Great Britain
Birmingham	1.7	Government	Great Britain
Sheffield	1.7	Government	Great Britain
Antwerp	1.6	Government	Belgium
Liege	1.5	Government	Belgium
Marseilles	1.4	Government	France
Lyons	1.3	Government	France
Blackburn	1.2	Government	Great Britain
Bolton	1.2	Government	Great Britain

*This covers Bell stations only, for the American cities.

†About 70 per cent. of development is private. This development of the Company and of the State are shown separately in the table in the proper order.

Summary as to Telephones.

Mr. Lewis' propositions concerning telephones were: that the institutional efficiency of private telephone systems was relatively low; that their rates were relatively high; and that the development of their service was relatively low. These propositions he attempted to prove by various assumptions which were erroneous. In rebutting his assumptions and conclusions it has been shown that:

1. The institutional efficiency of the American telephone service is not exceedingly low but exceedingly high.
2. The rates for American exchange service are clearly lower than those of any government system.
3. The rates for telephone service are lower in large American cities than in many large foreign cities operated by government administrations.
4. The rates in the smaller American exchanges are strikingly lower than in the smaller exchanges of the government systems. This is indicated most clearly, for general purposes, by the disparity between the "rural" development in the foreign countries and the development in the foreign cities, resulting from the disproportionately high rates in rural communities of foreign countries.
5. The history of rates in American cities which were formerly competitive does not warrant the statement that, following the withdrawal of competition, Bell rates have been increased. As a matter of fact, it is clearly the case that, in general, the reverse has been true.
6. The American toll rates are clearly lower than those of the government systems for all distances within which the great volume of interurban toll traffic passes; and are, in fact, so much lower, that the American toll rates as a whole are distinctly far below the foreign toll rates.
7. The development of toll traffic in the United States is not relatively low, but relatively high, and is, in fact, approached only in those countries where private operation of telephone systems has materially fostered the development of the utility.
8. The development of local service, as indicated by local traffic per capita, is at least double that in any foreign country, although it is noteworthy that, in those countries which rank nearest to the United States in the development of traffic, private operation is a factor of very great importance.
9. The development of telephones per one hundred population in the United States is more than double that in any foreign country.
10. The development of American telephone service, as indicated by the development in the largest cities, is greater, on the whole, than in foreign countries. It is, however, equalled in those large foreign cities where private companies operate, either exclusively, or in competition with the government.
11. The development of telephone service, as indicated by the number of telephones per one hundred population in the smaller exchanges and rural communities, is very much greater in the United States, not only absolutely, but relatively to the development in the large cities in the respective countries.

CONCLUSION.

It has been shown, in the preceding pages, that the information given by Mr. Lewis is not only seriously incomplete, but that, when not in error, it supports conclusions entirely contrary to those which he has drawn. While it has been a part of the purpose of this paper to meet some of the specific criticisms made by Mr. Lewis, the larger purpose of the paper has been to present significant information concerning the effect of government ownership on the efficiency, rates, and development of the telegraph and telephone services. In all fairness, it should be stated that the information given has been derived from many official sources which have probably not been available to Mr. Lewis, who has been compelled to rely largely upon the "Journal Télégraphique"—a source which, although official in a sense, is necessarily inadequate for a careful study of this subject.

In further justice to Mr. Lewis, something ought also to be said concerning the very serious difficulties under which the layman labors in the collection and interpretation of the highly technical statistics of the telegraph and telephone utilities. This difficulty, of course, is not peculiar to these utilities—it applies equally to any complex business or subject, whether it be transportation, banking, or insurance.

In conclusion, perhaps no more appropriate expression can be given to the spirit in which this paper has been prepared, than that furnished by a statement made by Theodore N. Vail, President of the American Telephone and Telegraph Company, in response to an inquiry, December 19th, 1913:

"Our telephone system has been the study of investigators from many countries. It has been considered the world's model, not because it is the largest, but because it gives the best service and is more useful to the public than any other system.

"Such success as we have achieved has come from our study of facts and our willingness to be guided by them. We have not endeavored to sell our telephone system to the government for the reason that the facts as we have gleaned them during the last thirty years from all parts of the world, have not justified such a course.

"Our people are personally familiar with every telephone system that today exists. The telephone experience of Japan or France, is as closely studied as the experience of one of our American cities.

"We have freely given our aid to make the government systems in foreign lands as good as possible, believing that every advance in the art helped us to advance. We have never found any foreign subscribers as well served as our subscribers, nor any foreign public receiving greater advantages from the telephone than the American public.

"We recognize our responsibility to the telephone-using public, which is practically the whole public, and for that reason favor an intelligent, painstaking, thorough, scientific study of the proposals for public ownership. We cannot be content if facts which we know to exist are carelessly ignored. But if all the facts are discovered, understood, and exploited, we are bound to be content with a decision based on these facts."

APPENDIX A.

INFORMATION CONCERNING THE ADEQUACY OF COMPENSATION FOR RAILWAY MAIL TRANSPORTATION IN THE UNITED STATES.

1. THE OFFICIAL DOUBT AS TO THE ADEQUACY OF COMPENSATION TO RAILROADS.

Postmaster General Burleson:

"Compensation To Railroads for Carrying The Mails.

"Compensation to railroads for carrying the mails is under the present laws adjusted upon the basis of average daily weights of mails carried. In addition to this certain rates of pay are allowed for full railway post office cars 40 feet and more in length, fitted up and furnished for the distribution of mails en route. Reference has been made in previous annual reports to the inquiry conducted by the department under authority of law into the operating receipts and expenditures of railroad companies carrying the mails and to the submission to Congress of the results of such inquiry, together with recommendation for a change in the method of adjusting pay.

"The whole subject has since been taken up by a joint committee of Congress authorized to make inquiry into the subject of postage on second-class mail matter and compensation for the transportation of mails. The department's officers in charge of transportation have, upon the request of the committee, appeared before it during the numerous hearings which have been held and have submitted such additional information as they possessed upon the general subject. The representatives of the railroad companies have also appeared before the committee. In the meantime the new conditions in the postal service, mainly those arising from the inauguration and the development of the parcel-post system, are being given careful consideration in connection with the general question, and before the commission is ready to report the final views of the department will be submitted to it.

"The determination of what shall be the basis for ascertaining a fair rate of compensation for carrying the mails is not free from difficulties. From a careful consideration of the subject it becomes evident that the carriage of the mails by the railroad companies for the Government can not be considered as of the same character of service as that performed by them as common carriers for the general public. The railroads have received certain benefits from the States from which they derive their corporate existence, and their interstate commerce is subject to the regulation of the Federal Government. Some of them have received substantial aid from the Federal Government by grants of lands, and otherwise. They are declared by law to be post roads. As mail carriers they are agencies of the Post Office Department and are performing a governmental function. The postal business is not carried on by the Government for profit but in furtherance of the constitutional power to establish post offices and post roads under which it furnishes postal facilities to all of its citizens. The railroads, therefore, may not deal with the Government as they would with a shipper who uses their facilities as a common carrier for profit or for some special advantage. Furthermore, the general business which sustains a railroad is to a large extent dependent upon the mails and their certain and expeditious transportation, and the carriage of the mails by the railroad contributes to its prosperity to an extent and in a manner which does not obtain for any other class of its business. From these and other considerations, it follows that rates for carrying the mails on railroads should be less than those which might be fixed for commercial business."

* * * * *

"In order to provide additional compensation to mail contractors for carrying parcel-post matter, Congress authorized the Postmaster General to make certain readjustments of pay to railroad companies and to screen wagon and star-route contractors.

"On account of the increased weight of mail resulting from the enactment of the parcel-post law, the Postmaster General was authorized by the act of March 4, 1913, to add to the compensation for transportation on railroad routes on and after July 1, 1913, for the remainder of the contract terms, not exceeding 5 per cent thereof per annum, excepting upon routes weighed since January 1, 1913, and to be adjusted from July 1, 1913. Careful estimates have been made of the increase in the weight of mails carried on all railroad routes coming within the scope of the law. The routes affected include those in the second, third, and fourth contract sections and those located in the New England States in the first contract section. Additional compensation has been allowed, based upon the summary rate earned by the estimated increased weight of mails, not exceeding, however, 5 per cent, the limit fixed by law. The increase in annual rate of compensation by the allowances made under this authority aggregates \$1,682,360.19."

"Criticism by some has been directed against the department for the inauguration of the parcel-post system with provisions of only 5 per cent increase in compensation to railroads where weighings have not occurred since January 1, 1913, and for * * *

"With respect to the first it should be remembered that Congress provided for the inauguration of the system, and, with such facts before it as were available, authorized the addition of not exceeding 5 per cent. to the compensation from July 1, 1913, as above stated. It must be presumed that Congress intended this allowance to be full compensation for the additional weights carried until it should make other provision. * * *"¹²

II. TABLE INDICATING, IN GENERAL, THE BASIS OF COMPENSATION TO RAILROADS. SCHEDULE OF COMPENSATION TO RAILROADS.¹¹

Average weight of mails per day carried over whole length of route	Pay Per Mile Per Annum				Land Grant Railroads	Indeterminate Weight Warranting Allowance of \$1 per mile
	3/3/1873	7/12/1876	6/17/1878	3/2/1907		
200 lbs.	\$50.00	\$45.00	\$42.75	\$42.75	\$34.20	
200-500 lbs.						12
500 lbs.	75.00	67.50	64.12	64.12	51.30	
500-1000 lbs.						20
1000 lbs.	100.00	90.00	85.50	85.50	68.40	
1000-1500 lbs.						20
1500 lbs.	125.00	112.50	106.87	106.87	85.50	
1500-2000 lbs.						20
2000 lbs.	150.00	135.00	118.25	118.25	102.60	
2000-3500 lbs.						60
3500 lbs.	175.00	157.50	149.62	149.62	119.70	
3500-5000 lbs.						60
5000 lbs.	200.00	180.00	171.00	171.00	136.80	
5000-48000 lbs.						80
For every additional 2000 lbs. over 5000 and under 48000	25.00	22.50	21.38	20.30	16.24	
For every 2000 lbs. over 48000	25.00	22.50	21.38	19.24	17.10	
Railway P. O. Cars						
40 ft. long.	25.00			25.00		
45 ft. long.	30.00			27.50		
50 ft. long.	40.00			32.50		
55 ft. long.	50.00			40.00		

III. PAYMENTS FOR TRANSPORTATION OF MAILS AND FOR TRANSPORTATION OF EXPRESS MATTER OF SIMILAR CHARACTER.

Presented by Mr. Julier before the Walcott Commission to Refute the Statement that More was Paid for Mail Transportation than for Express Transportation:

TABLE SHOWING AND COMPARING RATE RECEIVED BY RAILWAYS PER HUNDRED WEIGHT FOR TRANSPORTATION OF UNITED STATES MAIL AND RATES RECEIVED FOR THE CARRIAGE OF EXPRESS BUSINESS BETWEEN POINTS NAMED BELOW.¹⁵

		Mail	Express	
	Distance	Rate per 100 lbs. (a)	Amount Actually Received by Railroad Cos. per 100 lbs. (b)	Amount Actually Received by Railroad Cos. per 100 lbs. (c)
NEW YORK to:				
Buffalo	440	\$1.58	\$1.16	\$4.13
Chicago	980	3.57	2.59	5.47
Omaha	1,480	5.38	4.89	6.62
Indianapolis	1,400	3.27	2.57	5.04
Columbus	761	2.49	2.06	5.32
East St. Louis	1,171	4.38	3.50	5.70
Portland, Me.	347	1.33	1.22	4.83
CHICAGO to:				
Milwaukee	85	.34	.40	3.30
Minneapolis	421	1.83	2.00	4.52
New Orleans	922	5.27	3.16	6.43
Detroit	284	1.34	.75	3.48
Cincinnati	306	1.20	1.07	3.98
CINCINNATI to:				
St. Louis	374	1.61	1.31	3.72
Chicago	306	1.20	1.07	3.58
Cleveland	263	1.26	.92	3.47

(a) Allowed Railroad Companies under last weighing, including cost of railroad post office cars.

(b) On all classes of business carried for express companies, including heavy merchandise, fish, live stock, machines, etc.

(c) On shipments weighing 7 lbs. and under carried for express companies.

IV. STATEMENT OF THE CHICAGO, MILWAUKEE AND ST. PAUL RAILROAD COMPANY, 1906, SHOWING THAT PAYMENTS FOR TRANSPORTING EXPRESS MATTER HAVE INCREASED MORE RAPIDLY FROM 1894 TO 1905 THAN RECEIPTS FOR TRANSPORTING MAIL MATTER.¹⁶

TABLE COMPILED FROM ANNUAL REPORTS OF INTERSTATE COMMERCE COMMISSION SHOWING COMPARISON OF TOTAL EARNINGS OF ALL ROADS IN U. S. FROM MAIL AND EXPRESS.

Year	Mail Earnings	Express Earnings	Per cent. Express To Mail
1894	\$30,059,657	\$23,035,300	76
1895	30,969,746	24,284,508	78
1896	32,379,819	24,880,383	76
1897	33,754,466	24,901,066	73
1898	34,608,352	25,908,075	74
1899	35,999,011	26,756,054	74
1900	37,752,474	28,416,150	75
1901	38,453,602	31,121,613	80
1902	39,835,844	34,253,459	85
1903	41,709,396	38,331,964	91
1904	44,499,732	41,875,636	94
1905	45,426,125	45,149,155	99

TABLE SHOWING PRINCIPAL EXPENSE ITEMS OF POST OFFICE DEPARTMENT FROM 1898-1905.

	1898	1905	Increase	Per cent. Increase
Transportation of Mails on R. R. and R. R. P. O. car pay	\$34,203,253	\$44,893,960	\$10,690,706	31
Compensation to Postmasters	17,453,433	22,743,342	5,289,908	30
City Free Delivery	13,386,593	20,919,078	7,532,484	56
Compensation of Clerks in P. O.	10,589,069	21,215,303	10,626,234	100
Compensation of R. R. Mail Clerks	8,066,602	13,120,155	5,053,553	62
Transportation of Mails on Star Routes	5,286,614	7,326,596	2,039,981	38
Transportation of Foreign Mail	1,620,282	2,693,812	1,073,529	66
Rent, Light, Fuel, etc.	1,581,649	2,568,572	986,922	62
Rural Free Delivery*	50,000	20,819,944	20,769,944	..
Total Expenses	\$98,033,523	\$167,399,169	\$69,375,656	71
Total Receipts	\$9,012,618	152,826,585	63,813,966	72

*Commenced 1898.

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**V. CONGRESSMAN MOON, IN A SPEECH IN THE HOUSE OF REPRESENTATIVES,
JANUARY 17, 1914:**

"There is another question that is intensely vital to the welfare of the people, a question the consideration of which by the Committee on the Post Office and Post Roads awaits only the incoming report. That is the matter of the computation of pay, the method of pay to railroads and transportation companies of the United States for the handling of the mails. The railroads insist today that they are not sufficiently compensated for this service. The department tells us that the compensation of the railroads is too great. Of course, no honest man wants the railroad companies to carry the mails of the United States for less money than it costs them to carry those mails. No man would be unwilling that they should have a fair remuneration. Yet the method by which this compensation is determined is so unsatisfactory, so incomplete, so unbusiness-like that you cannot come within \$15,000,000 of determining what the legitimate pay should be for the inland transportation of the mails.

"You can know, of course, what you do pay. You know what they carry. You know what you receive by way of compensation in postage, but under the present methods you cannot estimate sufficiently close to determine what would be the legitimate compensation, as I say, within \$15,000,000 or \$20,000,000.

"By the way, I had better remark here that the United States is divided into four divisions for the purpose of weighing the mails and ascertaining the compensation due to inland carriers for the transportation of the mails. There is a quadrennial weighing. For instance, the mails are weighed in New England this year. That weight will form the basis of compensation by the ton-mile for four years. The mails in the western, northern, and southern sections are weighed, each once in four years, and the system of compensation there is the same. It is only every four years that you get at the weights, and it has been charged—I know not how truly—that during the weighing period the mails in one section are diverted and carried around through that section in order that the weight of the mails may be heavy in that section, in order that the same mail may be weighed many times and form the basis for computation of pay. Whether this is true or not, I cannot say. I would imagine, however, that no great amount of fraud of this sort would be practiced. Yet, let it be ever so honest, the conditions of this country, its transportation, its business, its industries, vary so much in a period of four years that if you base the pay upon the first of the four years the compensation for the next three years must be altogether a matter of speculation, because the increase may be double what it was, or it may be less than one-half of what it was, or it may be normal. The commission which is soon to report will bring before the committee a plan by which it is hoped to obtain more satisfactory results."¹⁶

APPENDIX B.

THE ELIMINATION OF CERTAIN TELEGRAPH OPERATIONS UNDER POSTALIZATION.

Under the heading "Efficiency of Telegraphic Administration," Mr. Lewis states: "The next element, 'efficiency in details of management,' will require more elaborate discussion." The discussion consists solely of two lists of operations involved in transmitting and accounting for commercial telegrams at the present time, which are followed by the simple statement that, "with the introduction of the stamp and other simplified postal methods," sixteen of the operations in the first list and that all of those in the second list (forty-two in number) could be eliminated.

A classification of the items named by Mr. Lewis, although his list is somewhat incomplete, will indicate the true relation of each detail of work to the general functions involved in telegraph operation. This classification is as follows:

1. Those operations directly involved in the receipt and delivery of telegrams at counters and by messengers. Most of these operations are not peculiar to the telegraph business, and may be perceived by the public and easily understood without special knowledge. They may be entitled "Commercial Operations."

2. Those operations directly involved in the electrical transmission and receipt of messages. These operations are not generally seen by the public, are not similar to those in other kinds of business, and are technical in character. They may be designated as "Operating Work."

3. Those items of work which are associated with general accounting and auditing of telegraph business, and known as "Accounting Operations."

Before discussing Mr. Lewis' suggestions under these heads, it may be stated that the obviously important question at issue is not whether the elimination of any of these practices would reduce expenses,—that is admitted,—but whether the practices themselves could or could not be abolished under government ownership, without detriment to the service. Changes involving all these operations which Mr. Lewis thinks could be eliminated, have been considered by the telegraph companies and have been rejected. Moreover, stamps have been used and the practice has been abandoned by telegraph companies. Mr. Lewis has raised no new question. It is proposed merely to show that practices which are not satisfactory under private operation would be equally unsatisfactory under Government ownership.

COMMERCIAL OPERATIONS.

The following items (as numbered in Mr. Lewis' list) may be described as "commercial operations." Those lettered Mr. Lewis thinks can be eliminated under postalization.

The Telegraph Company (i. e. Receiving Clerk).

1. Figures charges on telegrams.
2. Reads each message for purpose of properly deciphering it.
3. Marks on each message "time filed."
- 4a. Enters each telegram on sheet "receiving clerk's record."
5. Turns in cash to local cashier.
6. {
- 7b. { (See "Operating Work," page 63.)
- 8c. {

Delivery Clerk.

- 11e. Makes wet copy of telegram.
- 12f. Puts delivery number on telegram.
- 13g. Makes out delivery sheet for messenger.
- 14h. Enters telegram on "delivery clerk's record."

- 15. Encloses telegram in envelope and addresses envelope.
- 16i. Examines delivery sheet to see telegram is properly receipted for.
- 17j. Collects cash from messenger to cover "collect received" telegrams.
- 18k. Turns in cash to local cashier.

Messenger Boy.

- 19. Delivers telegram to proper addressee.
- 20-1. Secures receipt for telegram on delivery sheet.
- 21. Collects cash on "collect" telegrams.
- 22m. Returns delivery sheet and cash to delivery clerk.

4-a. ENTRY OF TELEGRAM ON THE RECEIVING CLERK'S RECORD. This process is really an accounting process. The receiving clerk's record is merely a check against the receiving clerk's cash. It is true that if stamps could be used exclusively and no cash payments were permitted, there would be no occasion for the receiving clerk's record. The elimination of this item depends upon the consideration as to whether or not stamps can be used exclusively. (See page 70.)

11-e. WET COPY OF TELEGRAM. This is necessary: first, in order that, if a message should be lost in delivery, a copy of it may be available for duplicating purposes; second, for service purposes, in order that if any question concerning the service on a message arises, the necessary data for investigating the service at the terminal office may be available; third, in order that a complete record of the message may be on hand for reference as a basis for the necessary service messages, in case the addressee requires its duplication or verification of doubtful words; fourth, in order that prompt and correct responses may be made to patrons making inquiry concerning their messages; and fifth, that a copy may be available in case the addressee should call while the messenger is out on his route with the message (which happens frequently in the case of transient addressees). Apparently, this operation is not related to the question of stamps; and it could not be eliminated without curtailment of service.

12f, 13g, 14h. DELIVERY NUMBER ON MESSAGE, DELIVERY SHEET, DELIVERY CLERK'S RECORD. What Mr. Lewis refers to as "delivery clerk's record" is actually known as the Delivery Register.

The delivery sheet is a small sheet which a messenger takes out with him and on which he secures receipts for the messages delivered. The delivery number is placed on the message itself (it is copied with the message on the water copy), on the delivery sheet and on the delivery register. The original message is, of course, delivered to the addressee and passes out of the possession of the telegraph company. After delivery, the only means of identifying the addressee's receipt on the delivery sheet with the message which was delivered to him is the delivery number appearing on the sheet and the corresponding number appearing on the water copy of the message.

The delivery number, as stated, is also placed on the delivery register (which is kept by the delivery clerk), and on this register is also entered the number of the messenger to whom the message was given and the time when he was sent out with it. The purpose of this is to insure that, if the messenger should lose any of the messages entrusted to him, or should lose his delivery sheet after having delivered his messages, there will be some way of determining what messages he had, the water copies of the messages being identifiable by reference to the number on the delivery register, as compared with the delivery numbers on the water copies. In service investigations and supervision, the delivery number also serves as a speedy means of tracing the service on messages which, without this ready means of identification, would be extremely laborious and expensive.

The use of stamps does not appear to be involved in these operations, so that Mr. Lewis' criticism of them indicates that the telegraph companies are merely doing work which they could avoid, and which their own interests would be likely to eliminate, if practicable. These operations appear to be as necessary as similar operations in connection with registered mail; and it is suggested that it is as important to secure an accurate delivery of telegrams as of registered mail.

16i, 20-1, 22m. MESSENGER SECURING RECEIPT FOR TELEGRAM ON DELIVERY SHEET AND EXAMINATION OF DELIVERY SHEET BY DELIVERY CLERK TO SEE THAT TELEGRAM IS PROPERLY RECEIPTED FOR. The suggested elimination of the addressee's receipt, infers that a service as important as that of the delivery of telegrams may be conducted with an utter lack of control or responsibility concerning its proper performance. Every message is important to the person who sends it and to the person who receives it; and, therefore, it is important to the telegraph company, or to whatever agency performs the telegraph service, to know that each message has been properly delivered. The record of its delivery, having been established by the addressee's signature, may be required to establish the fact and the time of delivery in response to inquiries either from the sender, or from the addressee, in cases where a subordinate or agent of the addressee has receipted for the message. It is frequently of importance, also, that the fact and time of delivery be established in connection with controversies arising between the parties to the correspondence. The prime necessity of the receipt and of the notation of the time of delivery by the addressee is that it may be determined whether the delivery service is being properly performed, and if it is not, that proper remedial action may be taken. The Post Office itself requires receipts, not only for registered mail matter, but also for special delivery letters.

The examination of the delivery sheet by the delivery clerk is a necessary corollary to the taking of the receipt. The examination is made for the purpose of verifying (so far as is possible by any means) the correct delivery of each message, and also of determining whether there has been any undue delay in the delivery of any message.

In fact, it appears not only that these operations are necessary to good telegraph service, but that their elimination would not be consonant with existing postal practice.

17j, 18k. COLLECTION OF CASH FROM THE MESSENGER TO COVER COLLECT RECEIVED TELEGRAMS. If the messenger is to collect the tolls on collect messages, he must turn in the cash to the delivery clerk, and the delivery clerk must account for such cash to the cashier. These functions can be eliminated only on the assumption that a "collect" telegraph service will not be given; for obviously "collect" messages cannot be handled with a strictly stamp settlement, and the government operated systems do not handle "collect" business. It needs no extended discussion to demonstrate the value and importance of "collect message" practice. Probably over 10 per cent. of the telegraph business of the United States is sent "collect" today to the great accommodation of the public. It is hard to understand on what theory the Government would curtail this service, purely to compel the adoption of exclusive stamp payments.

To summarize the considerations with respect to commercial operations, the only processes which could be eliminated by the use of stamps are 17j and 18k—and these could be dispensed with only by refusing a "collect" telegraph service. All other items which Mr. Lewis would eliminate are essential to good telegraph service and are similar to those of the Post Office for similar kinds of business.

OPERATING WORK.

The following is Mr. Lewis' list of operating items, those lettered being the operations to be dispensed with under postalization:

The Telegraph Company (i. e., Sending Operator).

- 6. Sends telegram.
- 7b. Puts time sent, numbers, sending and receiving operators' signals on telegram.
- 8c. Checks off numbers on number sheet, and initials sheet.

Receiving Operator.

- 9. Receives and transcribes telegram on proper blank.
- 10d. Checks off number on number sheet and initials opposite the number.

Receiving Operator (Relay Point).

- 23. Receives and transcribes telegram on proper blank.
- 24n. Checks off number on number sheet and initials sheet.

Sending Operator (Relay Point).

- 25. Sends telegram.
- 26-o. Times telegram, etc.
- 27p. Checks off number sheet.

All the foregoing processes are necessary to the maintenance of efficient service. They serve to disclose delays in transmission, to prevent the loss of messages, and to place the individual responsibility for delays, lost messages and errors.

7b. OPERATORS' SIGNALS. Good service can be maintained only by constant watchfulness against bad service. When errors are made in transmitting messages, when there are delays in their transmission, or when messages do not reach their destination at all, the fault is always that of some one individual who has handled the message at one of the stages in its progress. To eliminate inefficient service conditions, the first essential is to identify the individuals responsible for them. The operators' signals fix with certainty the identity of the operators who handled each message. The abolishment of their use would remove a safeguard against service deterioration, as indispensable under government operation as it is under private operation, if there is to be any serious intention of giving the public the kind of service to which it is entitled.

7b, 26-o. TIMING TELEGRAMS. Time is of the essence of telegraph service. The most satisfactory telegraph service is that which is most quickly performed. In general, the public is concerned only in the lapse of time between the filing of the message and its delivery to the addressee; but in order that this interval may be as short as possible, it is necessary that the time consumed in each of the steps which go to make up the total service on the message be reduced to a minimum. To do this, it is essential that there be some means of controlling the time consumed in those different functions, that there be some way of telling whether such time consumed is excessive, and of correcting any inefficiency in that respect which may develop. For this reason, all messages are timed when they are filed, when they are sent by the operator, when they are received, and when they are delivered, and, if relayed, they are timed when received at, and when sent from the relay office. The result is, that if any message has been unduly delayed, it can readily be ascertained when and where the delay occurred; also that there is, in each office, on the messages themselves, a complete record, which otherwise would not have been available, of the promptness with which the business is handled in that office. Such a record is of prime importance for the purposes of the inspection which it is necessary to make, to determine whether the service is being kept up to the standard.

The timing of messages also enables the responsible chiefs in operating rooms to arrange the routing and transmission of accumulated business in case of wire interruptions, and under normal conditions affords them a ready means of supervising and controlling the transmission of the telegrams passing through the office. Without timing, this control would be lacking, there would be no effective gauge of the speed of the service, there would be every opportunity for the service to become slack and to deteriorate without adequate means of locating the difficulty, and of correcting it.

10d, 24n, 27p. THE NUMBER SHEET AND NUMBERING OF TELEGRAMS. The primary object of the numbering of telegrams by operators in the order of their transmission and the checking-off of corresponding numbers on the so called number sheets, is to prevent the loss of messages.

In actual operation the first sending operator, when taking his place at the wire, establishes communication with the office with which he is to work, and begins the transmission of the first message. At the same time, with his left hand, he marks on the message the number "1," and the call of the office to which the message is being sent (as, for instance, "B" in the case of Baltimore). When he is completing the transmission of the message he adds, also with his left hand, the time, and his own "sign." The entire operation is simultaneous with the transmission of the message and occupies no additional time. The first thing the receiving operator writes on his receiving blank is the corresponding number of the message and the sign of the office from which it is sent to him. The sending operator, having sent message No. 1, is supposed to mark off the number "1" on the number sheet, under the heading "Sent," and the receiving operator, when re-

ceiving the message, to mark off the number "1" on his number sheet, under the heading "Received." In actual practice, where there is a series of messages going one way between two operators in succession, the transmission of none of them is delayed for the purpose of marking off the numbers on the sheet, but at the completion of the series the marking off of the corresponding numbers is done in one operation, which consumes no more than a second or so.

When either the sending operator or the receiving operator is relieved, the operator relieving him notes the number of the last message sent or received, respectively, and if he be the sending operator, assigns the next following number to the first message which he transmits, which the receiving operator is required to verify from his record. Each operator places his sign opposite the numbers of the messages which he has transmitted or received, respectively.

Messages may be lost from various causes. It may happen that a sending operator, having placed the number and the sign of the distant office on a message, is in some way interrupted, and that he may inadvertently place the message with the incomplete sending marks with the sent business, then proceeding with the next message, giving it the next following number. Assuming that he has thus erroneously placed the message No. 148 in the "sent" business without having actually transmitted it or completed its transmission, and proceeds to transmit the next message, giving it the No. 149, the receiving operator will challenge the incorrect number, thus preventing the loss of message No. 148, which would otherwise have occurred. It may happen that in the course of the transmission of a series of messages between two points the wire is temporarily interrupted by an intermediate ground or from any one of a number of possible causes. The sending operator frequently has no means of knowing that his signals are no longer reaching the distant office and, if the interruption occurs between messages, the receiving operator cannot tell whether the ensuing pause is one occurring naturally in the course of intervals between messages, or whether it is due to temporary wire failure. The sending operator, in the meantime, continues to send his messages, and the fact that they did not reach their destination cannot be detected until the wire is restored. The next number given the receiving operator reveals the gap. He challenges the number, gives the sending operator the last number which he has received, and the missing messages are thus easily identified and retransmitted. If the numbering were eliminated, as suggested by Mr. Lewis, the loss of the messages might not be discovered at all, and if it were discovered by chance, the description over the wire of the messages which had reached the distant office, and the identification of those which had not, would be an extremely laborious and time-consuming process; and with the volume of business handled in important offices, would in the end give no assurance of a correct result, particularly as all messages are removed from the operators' tables, for filing or distribution to other wires, as quickly as they are disposed of.

The accurate use of the number sheet is specially important at the time when one operator relieves another. It is customary for the relieving operator to be at the wire before the relieved operator leaves it, but there may be, on occasions, a short interval, and the number sheet prevents the loss of any messages which may be sent from the distant sending office in the interim. At the close of the day, the offices which have worked with each other compare numbers from the number sheets, as an additional check that no messages have gone astray or failed between them. The Telegraph Companies apply the most drastic discipline to any operators failing to observe strictly the rules with reference to the checking of numbers on number sheets. In spite of this, it has occasionally occurred that messages have been lost through negligence of operators in this very respect. The extent to which losses would occur, in the complete absence of a numbering system, can only be conjectured.

Secondary functions of the numbering system are the following:

The numbers of the messages afford a brief, convenient and absolutely safe way of identifying them when it is necessary to refer to them in service messages asking repetition, or the verification of specified text words, or reports of delivery, etc., more particularly in communications between chiefs when, on account of some mishap in the operating room, a quick repetition of the message is required.

The number sheets, showing how many messages have been handled by each operator, afford a most important means of gauging the efficiency of individual operators as affecting their rating. It enables the traffic chief to judge whether an operator is capable of handling the volume of business passing over the wire to which he is assigned, or if the capacity of the operator be established, to judge whether he is performing his full duty, and thus prevent avoidable delays in traffic. It thus plays an important part in enabling the chiefs to assign the operators so that the best use can be made of the wire facilities, and also in maintaining the efficiency of individual employees.

The number sheet is an automatic record of the number of messages handled in the operating room, and affords the cheapest, easiest and most accurate way of obtaining the statistics which are necessary, in order to check the operating cost, and to prevent extravagance in operation in individual offices.

The best thought of experienced telegraph men has for many years been given to devising the simplest and most effective means of protecting the service, and it has not been possible to find any expedients which are as effective, and as little wasteful of time, as the established safeguards, the removal of which Mr. Lewis suggests.

ACCOUNTING OPERATIONS.

Mr. Lewis makes the statement that the following accounting operations would give way, under public management:

Cashier (Local).

1. Checks up and balances "receiving clerk's record" of messages.
2. Checks up and balances "delivery clerk's record" of messages.
3. Checks up and balances money-order clerk's sent-and-received record.
4. Checks up "charge accounts" weekly or monthly bills of customers for messages.
5. Turns over above four accounts to bookkeeper.
6. Checks up receiving clerk's record, branch offices.
7. Checks up delivery clerk's record, branch offices.

Bookkeeper (Local).

8. Records cash received, daily receiving clerk's record.
9. Records cash received, daily delivery clerk's record.
10. Records cash received, "sent" money orders record.
11. Records cash received, "received" money orders record.
12. Records cash received, receiving clerk's record, branch offices.
13. Records cash received, delivery clerk's record, branch offices.
14. Records all charge accounts.
15. Records payment of charge accounts.
16. Makes out weekly balance sheet.

Charge Account Clerk.

17. Makes out charge accounts (weekly and monthly).
18. Balances with bookkeeper.
19. Sends out bills of charge accounts.

Auditor's Office (Local).

20. Balances with cashier "receiving clerk's" record.
21. Balances with cashier "delivery clerk's" record.
22. Balances with cashier "receiving clerk's" record, branch offices.
23. Balances with cashier "delivery clerk's" record, branch offices.
24. Checks up number sheets of main and branch offices.
25. Keeps book record of branch office receipts.

26. Inspects "sent messages" to see that they all bear number, time and operator's signature.
27. Makes daily record of messages on forms supplied for "Sent paid," "Sent collect," "Received paid," "Received collect," for public, press and Government accounts.
28. Statement of Government messages sent paid, for Government, for general auditor.
29. Statement of Government messages sent collect, for Government, for general auditor.
30. Statement of Government messages received paid, for Government, for general auditor.
31. Statement of Government messages received collect, for Government, for general auditor.
32. Statement of messages upon which are "other line" tolls, for general auditor.
33. Makes daily check sheets for each city (amount of tolls).
34. Makes statement of "deadhead" messages.
35. Makes monthly statement of uncollected messages.
36. Sorts all messages as to cities.
37. Sorts all messages as "sent paid."
38. Sorts all messages as "received paid."
39. Sorts all messages as "sent collect."
40. Sorts all messages as "received collect."
41. Figures amount of tolls on each message.
42. Files all messages by dates.
43. Answers all check-error sheets.
44. Makes daily statement of "sent" press report (number of words and city).
45. Counts number of words in "sent" press matter.
46. Makes daily statement of "received collect" press matter.
47. Counts number of words in "received collect" press matter.

At the outset, it should be pointed out that there is no "Auditor's Office (local)" in any individual office. The functions which are attributed to the "Auditor's Office (local)," insofar as they are performed, are bookkeepers' functions. It is true that the bookkeeper performs auditing functions, but the auditing features of his activities are coincident with the other functions which he performs. While he may be referred to as a "local auditor," at the same time the "local auditor" and the bookkeeper are one and the same person.

As a result of the separate classification under "Bookkeeper" and under "Auditor's Office (local)," there is a duplication in the enumeration of processes.

In the larger offices, constituting less than 10% of the total number of independent Western Union main offices (excluding Branch Offices and Railroad Offices where no such organization exists), there is a cashier and a bookkeeper. In that proportion of the remainder of the offices where the employment of a bookkeeper is warranted by the amount of business handled, the cashier's functions, so far as the cash is concerned, are performed by the manager, and so far as the reports and records are concerned, by the bookkeeper, thus consolidating the majority of the functions which in Mr. Lewis' list are separately enumerated.

Assuming an office sufficiently large to have a cashier and a bookkeeper, and checking the items enumerated by Mr. Lewis according to the number given them in his list, and remembering that the functions attributed to a local auditor's office are, if at all, performed by the bookkeeper:

1, 2, 6 and 7: The cashier does not check up and balance the receiving clerk's record and the delivery clerk's record at main and branch offices. These are one and the same operation, and it is performed by the bookkeeper.

The receiving clerk and delivery clerk turn their cash over to the cashier, but their registers go to the bookkeeper, who does the checking, and in that connection simultaneously obtains a record of the cash received according to the registers. Therefore, numbers 8, 9, 12 and 13 are coincident with numbers 1, 2, 6 and 7 respectively, and represent pure repetition in the enumera-

tion. There is a balancing between the bookkeeper and the cashier, as enumerated under 20, 21, 22 and 23, but this consists merely of a comparison by the cashier of the totals of his record of cash received, and of the totals of the bookkeeper's record of what should have been received, which is submitted to the cashier.

3: There is no checking of the transfer agent's record of money transfer receipts and payments performed at the local office except where there are special transfer agents, which is true only of the very largest offices. At these offices the cashier checks the transfer agent's balance, which is taken into his accounts, at the end of the month only.

There are less than 10 offices in the Eastern Division in which there is a special money transfer agent, and possibly less than 30 offices in the whole country.

In all other cases where an office is a money transfer office, the manager or cashier is the transfer agent, and performs the duties described as those of the "money order clerk."

4: This item is correct.

5: On account of the inaccuracies in the items preceding No. 5, this statement is, of course, also inaccurate, and should be eliminated.

6, 7, 8 and 9 are covered under items 1, 2, 6 and 7.

10: The bookkeeper has nothing to do with the money transfer service. The cashier, however, records cash from money transfer receipts.

11: There is, of course, no "Cash Received" on "Received" money orders record, and this item should be eliminated.

12 and 13 are covered under items 1, 2, 6 and 7.

14: This work is performed by the cashier, and not by the bookkeeper, and the item is correct insofar as it is a monthly operation, being the entry of totals of monthly bills rendered in the customers' ledger.

15: This appears to be correct.

16: There is no weekly balance sheet prepared. Perhaps this is confused with the daily summary of business furnished to the cashier.

17 and 19: In the very large majority of offices, the bookkeeper does this work himself, and there is no separate "Charge Account" clerk, as distinguished from the bookkeeping department. In the very largest offices there may be a special bill clerk or bill clerks, but they are a part of the bookkeeping department.

18: As the making out of the bills is a bookkeeper's function, as covered by No. 17, the item No. 18, supposed balancing between charge account clerk and bookkeeper, falls away, because that would be in fact a balancing of the bookkeeper with himself.

19: Covered under item No. 17.

20, 21, 22 and 23 are covered under items Nos. 1, 2, 6 and 7.

24: At the very largest cities only is this work done, and then in connection with item No.

27. At the large majority of offices it is not done, as it is covered by item No. 27.

25: Only the very large offices maintain this record. The great majority of offices do not.

26: The inspection of messages to see that they bear the number, time and operator's signature is performed in the operating room. Neither the bookkeeper nor any "Auditor's Office (local)" has anything to do with it.

27: This is substantially correct, except that the function is performed by the bookkeeper.

28, 29, 30 and 31: The bookkeeper makes a statement, for purposes of collection through the general auditor's office, of Government messages sent paid and received collect (items 28 and 31). This is, however, a single statement and should not be separated into two separate items, and, further, it should be considered a part of item No. 17, in the same way as any other charge account.

No such statement is made of Government messages sent collect or Government messages received paid, and items 29 and 30 should, therefore, be eliminated.

32: No statement is made of messages upon which there are "other line" tolls for the general auditor. (The only exception is in the case of wireless messages, where settlements are made through the general auditor, an abstract being prepared by the coastal stations only. This, of course, is a practically negligible proportion of the total business.) There used to be such a statement many years ago, but it has long since been abandoned.

33: It is true that a daily check is made by the bookkeeper, but this is done by daily entries in a loose-leaf ledger account, and not by making daily sheets.

34: The bookkeeper makes a statement of "deadhead" messages, but this statement is made once at the end of each month only.

35: The bookkeeper makes a monthly statement of uncollected messages, except where there are less than five such messages.

36, 37, 38, 39, 40 and 42: The bookkeeper does sort all messages by cities, and according to whether they are sent paid, received paid, sent collect or received collect, and files them by date, but this in the average office is all one operation. In the very largest offices (such as New York, Chicago, Philadelphia and other large cities), there are two processes involved; one, the separation of the messages according to whether they are sent paid, received paid, sent collect or received collect and the second operation, their separation according to cities. The arrangement by dates is automatic in all cases, because each day's business is handled separately.

41: The bookkeeper figures amount of tolls on each message. This is correct, but, as to the cash business, is an incident to the checking and receiving clerk's records. As to messages received paid and sent collect, it is an incident to the keeping of the check record against each city (item 33).

43: Answers all check error sheets. This is correct, but is a monthly operation.

44 and 46: The bookkeeper does make a daily statement of "sent" press matter, and of "received collect" press matter, but the two classes of messages are listed in one operation, and should not be separated into distinct functions.

45 and 47: Counting of press messages. In the average office the press matter is counted by the operator, and in the average office the operator's count is accepted by the bookkeeper. In the larger offices, the bookkeeping department counts such press matter as has not been counted by operators. The bookkeeping department counts all Press Association matter, because that is not counted by the Press Association operators, or by the telegraph company's operators. The counting of such press matter is an incident to posting the tolls in the Check Ledger (item 33).

Statement of Actual Daily Accounting Operations at Average Western Union Independent Main Offices.

CASHIER.

1. Records cash received from branch offices, receivers and customers and on money transfers.
2. Verifies record of cash received with bookkeeper's daily summary and posts credits to customers' accounts.
3. Records money transfer receipts and payments.
4. Maintains daily record of debits and credits.

BOOKKEEPER.

1. Assorts messages into "Receipts" (Cash and Charged), "Checks," "Dead Heads" and "Service Messages."
2. Checks receivers' and delivery clerks' registers.
3. Enters charges on bills.
4. Assorts messages by States and towns.

5. Enters message tolls in check ledger
6. Prepares summary of daily business.
7. Counts and classifies messages for statistical purposes.

RECEIVERS AND DELIVERY CLERKS, MAIN AND BRANCH OFFICES.

1. Enter "Sent Paid" and "Received Collect" messages on receivers' and delivery clerks' registers.

A statement, showing the net result of the foregoing criticism of Mr. Lewis' enumeration of accounting processes, and also a comparison between his enumeration and the actual number of daily accounting operations, follows:

Operations on Mr. Lewis' List.	Disposition.	Covered on Actual List of: Daily Operations under
1, 2, 6, 7, 8, 9, 12, 13, 20, 21, 22 and 23.		Cashier 1 Bookkeeper
3	Eliminated	
5	Eliminated	
10		Cashier 3
11	Eliminated	
14	Monthly Operation	
15		Cashier 2
16		Bookkeeper 6
17 and 19		Bookkeeper 3
18	Eliminated	
24 and 27		Bookkeeper 7
25	Not kept at average office	
26	Eliminated	
28 and 31		Bookkeeper 3
29 and 30	Eliminated	
32	Eliminated	
33		Bookkeeper 5
34	Monthly Operation	
35	Monthly Operation	
36, 37, 38, 39, 40 and 42		Bookkeeper 1 and 4
41	Eliminated	
43	Monthly Operation	
44 and 46		Bookkeeper 7
45 and 47		Bookkeeper 5

SUMMARY.

Operations enumerated on Mr. Lewis' list.....	47
No. of actual daily operations.....	12
Difference	35
Accounted for as follows:	
Eliminated	9
Consolidated	22
Monthly Operation	4
	35
Less:	
Operations not covered by Mr. Lewis.....	2
	33

Mr. Lewis' suggestions concerning the elimination of accounting processes are, of course, based on the assumption of the use of stamp for the purpose of paying tolls on messages. The more important consideration in dealing with this phase of the matter is, therefore, whether the use of stamps in connection with telegraph traffic in this country is feasible. The result of applying the stamp system would necessarily be to place the service on a strictly cash basis. Every message would have to be either prepaid with stamps when filed, or paid for, in accordance with due stamps, by the addressee. It would eliminate any comprehensive facilities for the acceptance of messages over the telephone, and it would also eliminate all charge accounts.

The Western Union Company statistics show that in the month of October, 1913, at so-called test offices (331 offices), 2,553,625 messages were filed at the counter, 2,161,919 were collected by messengers, and 606,126 messages, representing 11.4% of the total number of messages filed, were filed by telephone. The acceptance of messages over the telephone, of course, involves the extension of credit to the person filing the message. The method in which the tolls are collected in connection with telephone bills is familiar. The percentage of messages thus filed is some indication of the extent to which the public has accepted and makes use of this facility. Particularly in rural communities, where a person wishing to send a message may be located at a considerable distance from the telegraph office, the use of the telephone for filing messages is practically indispensable, and under less rigorous conditions, it has been found to be a great advantage to the telegraph-using public. In view of the present development and the probable normal growth of the practice, as its advantages become more and more apparent, it is doubtful whether the people would tolerate the abolishment of this convenience. On the other hand, if, under a stamp system, the practice of accepting messages over the telephone is to be continued, it will, of necessity, just as it does now, involve the extension of credit and the keeping of such records as are necessary to keep a proper account of the amounts due, and to enforce their collection.

The business community generally has become accustomed to the convenience of a telegraph charge account, because it simplifies the processes of filing a message for the customer. A charge account customer can send his message to the telegraph office by messenger, or in any way in which he prefers. He need not consult any tariffs, he need not "count" his message. The correct amount of the tolls will be determined when the message is received at the telegraph office and the proper charge made against his account. Where telegrams are filed in rapid succession as, for instance, in the case of firms dealing on Exchanges, and seconds are important, the elimination of unnecessary processes on the part of the customer is indispensable.

In the case of the cash customer who files his message at the counter, the affixing of stamps would merely substitute certain processes not now employed for some of the existing ones. Receiving clerks would have to procure stamps from some central distributing bureau. That bureau would have to keep accounts of the stamps received by it, and of the stamps distributed to receiving clerks. The receiving clerk would still have to count each message to determine the proper amount of the charges. Instead of then simply taking the cash for the amount, he would have to go through the process of selling stamps to the customer who, in turn, would have to affix them to the message. The receiving clerk would be obliged to keep account of the number of stamps furnished him and of the number sold, in order that the cash on hand might be ascertained, to correspond with the difference. The essential processes of determining the charge on the message and collecting the charge from the customer would be the same as now.

APPENDIX C.

LETTER CONCERNING THE AMALGAMATION OF POST OFFICE
AND TELEGRAPH ORGANIZATIONS IN EUROPE.

"Stockholm, Dec. 18th, 1913.

"Dear Sir:

Concerning the question of amalgamating the Post and the Telegraph, you expressed a desire to know Count Hamilton's personal views on this point. I am now in a position to give you a translation of some opinions in a statement signed by him and handed in to the Government in connection with a report of a Committee that had proposed some changes in the organization of our government departments and also hinted at the possible advantages of a fusion of the Post and Telegraph. The passage in the statement reads as follows: * * * The Commissioners have also brought up the old and, in the opinion of the Telegraph Administration, long ago abandoned question of amalgamating the Telegraph and Post departments into one, though the Commissioners declare that they are not convinced that the present time is fully suited for the realization of such an amalgamation. The Commis therefore do not give a full statement of the use and the advisability of the fusion, but emphasize that experience from abroad decidedly suggests that an extended union between the Telegraph and Post departments under ordinary circumstances could be advantageously realized, and that a common administration for these two departments is theoretically the best form of organization. The present circumstances, that were not to be considered as ordinary, should consist of the fact that an important work is going on within the Telegraph department with respect to the uniform organization of the Telephone system. Affirming the statement as to the circumstances and expressing the hope that the work of organization within the Telegraph department, the growth of which is so sensitive, may never slacken, the Telegraph Administration in this connection dares to pronounce the apprehension that by eventually satisfying the desire of taking examples from abroad in the aforesaid question, difficulties arise, which easily may happen when foreign models are replanted in our own soil, that is to say that when the transplantation is once effected, the foreign prototypes have in the meantime vanished and have been replaced just by that which was rejected by us at home. An expert delegated from the English Post and Telegraph departments, having studied these matters during a long time in European states, on his visit to Stockholm last summer, expressed an opinion little agreeing with that expressed by the Commissioners. In a letter of a later date the following interesting information is given:

I have had the advantage, during the past 18 months, of having visited many of the European countries and of having met many officers of the Postal and Telegraph services in these countries. I have found that, in every country I have visited, there is a consensus of opinion that today the Postal Department should be administered separately from the Telegraph and Telephone Department, and in those countries in which the Post, Telegraphs and Telephones are combined under one Administration in theory, I have found that at headquarters the Administration of the Posts is separated in practice from that of the Telegraphs and Telephones; and that this separation extends in many cases to the Provincial Administrations. As you are aware, two Royal Commissions have recently investigated the organization of the Posts, Telegraphs and Telephones in Italy, where at the present time the Telephones are under an Administration separate from that of the Post and Telegraphs. It has been strongly urged by these Royal Commissions that the Telegraphs should be separated from the Posts and placed with the Telephones; and that in future the Postal Department should constitute an Administration separate from that of the Telegraphs and Telephones.

"From this might be concluded that the tendency abroad—if attention necessarily must be paid to matters abroad—goes in a direction totally different from that supposed by the Commis. The opposite would just have been miraculous. Considering the development of later years characteriz-

ing not only the telephone but nowadays also the telegraph, the combination of the exclusively technical Telegraph Department with the exclusively administrative Post Department would be an extremely unpractical proceeding. The advantages that in some respects could be realized by the amalgamation, and which are incidentally referred to by the Comm:s, possess a worth that is comparatively insignificant; and that may be gained very easily without the risk of the great inconveniences that, according to the opinion of the Telegraph Administration, an amalgamation would bring to both of the departments threatened. Moreover, the Comm:s themselves point out that already, at the present time, a good deal is done in favor of the public in the respect referred to by the Comm:s. The Telegraph Administration can add to this that still more will be done in the same direction, though in a simpler and more practical way than that suggested by the Comm:s, with proposed meetings of the chiefs, reporting traffic division chiefs from both sides, minutes, and so on. The Post and Telegraph Committee of 1902 did not either mention a word regarding the question of amalgamation, probably because already, at that time, it was considered that it had been got rid of for good on account of the unwillingness of the Committee of 1902 to realize it. Thus, not having been considered even at an earlier stage possible to carry, it would be still unhappier to try it now or in the future when the development, which is fortunately swelling year by year on both sides, is also yearly claiming an ever more intensive management."

Faithfully yours,

(Sd.) ERNST HALLING, Statistician."

APPENDIX D.

TELEGRAPH AND TELEPHONE DEFICITS UNDER GOVERNMENT OPERATION

The facts concerning the financial results of government operation of telegraphs and telephones are difficult to ascertain, not only because the expense accounts of the two services are usually consolidated (and, in some cases, are also combined with those for the postal service as well), but also because the system of accounting adopted often fails to differentiate between capital and current expenditure. However, some definite information is available on this subject, and, in addition, a great deal of data which indicates the probable facts in a general way. This information follows:

GENERAL

Comments Concerning the Earning Capacity of European Telegraph and Telephone Administrations.

From Editorial Review of the Year 1901, in the "Journal Télégraphique," January 25, 1902, (Translation):

"As stated above, the telephone has become the rival of the telegraph and tends to diminish the telegraph revenues. One would be inclined to conclude that this rivalry is detrimental to the interests of the telegraph service only in countries in which the telephone service is still operated exclusively by private enterprise, whereas it is not of great consequence in states in which both the telephone and the telegraph services are in the hands of the government, provided that the decrease which the rivalry causes in the revenues of one service is offset by an increase in the revenues of the other. This conclusion would be justified if the revenues of the telephone service were sufficient not only to cover its own expenses, but also to palliate the loss in telegraph revenues. But, unfortunately, such is not the case, for only a very small number of Administrations succeed in covering the expenses of both services. * * * It is a fact that the traffic of the two services does not increase as rapidly as the expenses incurred for the construction and the extension of the systems and that this traffic becomes from day to day less productive, due to the constant reductions in rates which the Administrations are forced to effect."

From a monograph by Dr. Hans Schwaighofer, a German authority. (Translation):

"The reasons why, from year to year, not only in Germany but in almost all countries, subsidies for the telegraph service are necessary, are various. Probably the main reason is that * * * the rates were originally based upon entirely erroneous assumptions."⁹⁸

AUSTRIA

No information is available as to the financial results of either the telegraph or the telephone service, but the combined postal, telegraph, and telephone services produced (1912) a deficit of about \$500,000.⁹⁹ As the postal service is generally conceded to be profitable in Europe, it is very probable that this deficit results from telegraph or telephone operation, or both, on which, therefore, the deficit is probably greater than \$500,000.

BELGIUM

No information.

DENMARK

From 1876-77 until 1902-03, the combined telegraph and telephone services showed annual deficits, but since that date the published receipts have exceeded the published expenses by about 15%. In reply to an inquiry, however, the Administration explains that no charges for interest or depreciation are included in the published expenses, so that the published profit is fictitious. It is significant that the net result of the telegraph and telephone operations from 1876 to 1911, even without allowing for interest or depreciation, was a loss of about \$395,000.⁹⁹

FRANCE

Telegraphs.

Senator Emile Dupont states (1911), in an official report on the Budget (i.e., Appropriation Bill), that the entire telegraph service is operated at a loss.¹⁰⁰ In discussing this loss, he refers to the official report on the Budget of 1905, made by M. Sembat, as Secretary of the House of Deputies Budget Committee, in which Sembat estimated the loss on the telegraph service in 1905 at \$1,880,000., or about 23% of the telegraph revenue. This estimate, Senator Dupont thinks, is conservative.¹⁰¹

Telephones.

M. Sembat, in the report just referred to, estimated a deficit in the telephone service of \$380,000., or over 5%.¹⁰¹

GERMANY

February 15, 1901, Representative Paasche stated in the Reichstag that, according to a communication from the Secretary of State for the Post Office, the German telegraphs required a subsidy of \$3,500,000. per annum, including charges for depreciation and interest on capital. This was about 45% of the telegraph revenue for 1900.¹⁰³

March 27, 1912, Secretary of State for the Imperial Post Office Kraetke stated in the Reichstag: "The gentlemen know that the Telegraph Administration operates at a very heavy loss." (Translation.)¹⁰⁴

GERMANY—BAVARIA

A special report of the Imperial Post Office, published in 1908, states that the loss on the telephone service in Bavaria is 150,000 marks per annum. This loss, however, appears to result from the toll service, as the report shows a net profit from the exchange service. The total loss on the toll service is 250,000 marks per annum.¹⁰⁵

GREAT BRITAIN

From "The Post Office. An Historical Summary," published by the Postmaster-General of Great Britain in 1911:¹⁰⁷

"At no time has the revenue from the telegraph service been sufficient to pay the interest on the capital; and for the last twenty years the service has been carried on at a considerable loss. * * *

"From 1892 onwards the balance sheet has regularly shown a deficit * * * .
"The largest deficit hitherto recorded occurred in 1903-4 when it amounted to 957,782£. In 1909-10 it was 858,314£ or 1,130,005£ including the interest on stock."

From First, Second, and Third Reports from the Committee of Public Accounts, 1910:¹⁰⁸
Sir John Brigg:

"To have established a capital account for telegraphs would have involved the valuation of the assets of the undertaking at the present time, and the inter-departmental Committee on which I sat, on which the Treasury were represented, and on which we had Mr. Peat, the then President of the Chartered Accountants, recommended in the circumstances that it was not worth to incur the huge expense of a valuation and that for telegraphs we should dispense with the capital account. One reason why that was recommended was that we knew the loss was about a million (£) a year, and it was not very encouraging."

The telegraph deficit in the year 1912-1913 was officially reported as £957,566 (\$4,653,771). This was about 30% of the receipts.¹⁰⁹

ITALY

No information.

HUNGARY

No information.

NETHERLANDS

The telegraph service resulted in 1912 in a deficit of F1,1670,228 (\$71,431.) or about 62% of the telegraph receipts.¹¹⁰

NORWAY

No information.

SWEDEN

From Report of Walter F. Burgess to Chicago City Council, April 1907:

"The manner in which the figures of the (Telegraph and Telephone) Department are presented, and the padding of the 'assets' is an excellent example of the way in which the figures of many of the continental Telephone and Telegraph Departments are presented and there can be no doubt that if the Telegraph and Telephone Department made proper allowance for depreciation upon its property and was obliged to create a sinking fund and pay interest for all moneys which it has obtained at different times, the alleged profit which it shows at the present time would be converted into a deficit."

SWITZERLAND

From Message of the Swiss Federal Council to the Federal Assembly, December 20, 1909.
(Translation):

"The average receipt from a domestic telegram (65.7 centimes) is considerably below the average cost for all kinds of telegrams (74.5 centimes), and this proportion grows worse, if we make the comparison with the cost of a domestic telegram only for local communication."

The deficit on domestic telegraph traffic is, therefore, about 22% of the receipts therefrom.

The loss on the telephone service from 1901 to 1909 was 3,613,953 Francs (about \$700,000.). This was about 14% of the telephone revenue for the same period.¹²

AUSTRALIA

In 1910 a Royal Commission on Postal Services made the following statements concerning the financial results of the Australian Post Office Department:¹³

"Accepting the most liberal reading * * * the estimated loss on the transaction of the Department from the inception of the Commonwealth to June 30, 1909, amounted to at least £2,300,000 (\$11,190,000.).

"The information furnished would make it appear certain that the postal section of the Department returns a profit as a whole but the extent of such profit was not ascertainable. * * *

"Your Commissioners therefore conclude that the Department's unsound financial position is due to the fact that telegraphic and telephonic services are rendered at rates which do not return revenue sufficient to cover all charges against capital account, and working expenses.

"Consequently the postal section of the Department has to assist in carrying the financial burden of the telegraph and telephone sections. This is distinctly inequitable, and the result is that the mail facilities to outlying districts suffer curtailment, while telegraphic and telephonic facilities are furnished at a loss. * * *

"Your Commissioners endeavored to obtain the above mentioned information with the object of definitely establishing which were paying and which were non-paying branches of the Department, and of showing the relative extent to which they were paying or non-paying. The Accountant in New South Wales estimated the cost of earning £1 of revenue to be as follows:

Postal Service	£0	14	10
Telegraph Service	1	9	6
Telephone Service	1	5	0

"The only other information on this subject was supplied by the South Australian representative of the Commonwealth Auditor-General, who had for many years been associated with the Accounts Branch in New South Wales. This witness' estimate of the cost of obtaining £1 of revenue in South Australia was as follows:

Postal Service	£0	15	10
Telegraph Service	1	1	5
Telephone Service	1	3	2

"In addition to the figures quoted, the Chief Electrical Engineer stated that to obtain £1 of revenue from the telephone service involved an expenditure of £1 7s., exclusive of sinking fund."

It will be noted that these official estimates of deficits in telegraph and telephones are in proportion as follows:

	Per Cent. of Deficits to Revenue.	
	Telegraph.	Telephone.
New South Wales	47.5	25.0
South Australia	7.1	15.8
Australia		35.0

Another official report shows that the results of the operation of the entire postal services for the year ended June 30, 1913, was a deficit of £407,102 (\$1,982,587.). This loss was 9.6% of the total Postal Department revenue, and was the result of heavy deficits in both the telegraph and telephone branches, as follows:¹⁷

Telegraphs	£164,108	(\$799,206.)
Telephones	£221,757	(\$1,079,956.)
% of telegraph loss to telegraph revenue.....	20.	
% of telephone loss to telephone revenue.....	25.7	

NEW ZEALAND

The following statistics show the annual losses, in recent years, in the New Zealand telegraph and telephone toll services, which are not separated as to expense. The net results shown below, it will be noted, are exclusive of interest charges which, if taken into account, would materially increase the deficits shown:

Year Ended	Total Value of Telegraph and Telephone Toll Business.	Total Telegraph and Telephone Toll Expenditure (excluding interest charges).	Official Net Profit (excluding interest charges) of the Combined Telegraph and Telephone Toll services.	
March 31.	£	£	£	\$
1908.....	231,897	275,757	— 43,860	— 213,160
1909.....	242,925	307,166	— 64,241	— 312,211
1910.....	255,063	322,485	— 67,422	— 327,671
1911.....	277,817	344,046	— 66,229	— 321,873
1912.....	300,166	364,613	— 64,447	— 313,212
Totals.....	1,307,868	1,614,067	—306,199	—1,488,127

The loss in 1912 was about 21.3% of the revenues, and for the five year period was about 23.4% of the revenues.

The above statistics were computed from those published in the Annual Reports of the Post and Telegraph Department, New Zealand, and, to avoid errors due to possible misinterpretation of the reports, were submitted by letter to the General Post Office, New Zealand, for verification. The following is part of the reply from the Secretary:

"The result arrived at by you in connection with the loss on the combined telegraph and telephone toll services is correct. The deficit for the combined services, after the value of free government work is taken into account, amounts, as you say, to £64,447.

"Your assumption, that the deficit is due to the rates being too low, is also correct. It has been found from specially computed statistics that the only classes of telegrams which are profitable to the Department are 'Urgent' and bureau messages."

APPENDIX E.

**RELATIVE VALUE OF MONEY IN FOREIGN COUNTRIES
AND IN THE UNITED STATES, AS REFLECTED IN THE WAGES
OF TELEPHONE OPERATORS.**

COMPARISON OF THE WAGES OF ORDINARY DAY SWITCHBOARD OPERATORS.

These wages are here represented by the minimum wage (on beginning full active service) and the wage at the end of three years of service in the largest exchange in each country.

Country.	Largest Exchange.	Minimum Weekly Wage.		Weekly Wage at end of Three Years.	
		¹⁶⁷ Actual.	Expressed in per cent., United States Figure being 100%.	¹⁶⁷ Actual.	Expressed in per cent., United States Figure being 100%.
Austria	Vienna	\$3.00	50%	\$3.30	33%
Belgium.....	Brussels	2.60	43%	3.35	34%
Denmark.....	Copenhagen	2.50	42%	3.40	34%
France.....	Paris	4.10	68%	4.45	45%
German Empire.....	Berlin	3.95	66%	4.60	46%
Great Britain.....	London	2.65	44%	5.50*	55%
Netherlands.....	Amsterdam	3.20	53%	7.20	72%
Norway.....	Christiania	3.70	62%	4.00	40%
Sweden:					
State.....	Stockholm	3.10	52%	4.00	40%
Company.....	Stockholm	3.10	52%	4.00	40%
Switzerland.....	Zurich	5.20	87%	6.70	67%
United States.....	New York	6.00	100%	10.00	100%

*Only if the operator is 22 years of age or over; if operator is less than 22 years of age, her wage is less than this figure.

APPENDIX F.

HISTORY OF TELEGRAPH RATES.

OUTLINE OF THE HISTORY OF ORDINARY TELEGRAPH RATES IN THE UNITED STATES.¹¹⁴

The fundamental basis of the Western Union rate schedule consists of "state" rates and "square" rates, the squares used for rate purposes having dimensions of 50 miles on each side. Except where special or "exception" rates are in effect, the "square" rates apply to all points to which the "state" rates are not lower.

The "square" rates were originally adopted in 1869; from that time on, such rates gradually replaced, for the shorter hauls, the almost invariably higher rates previously in effect. Before 1880, possibly at as early a date as 1875, "square" rates had been extended over the whole United States—the western and southern schedule being, however, higher than the eastern schedule.

On April 1, 1889, a rather general reduction in the so-called "state" rates was introduced. As a result of this change, the maximum rates between points lying east of the Mississippi River, west of New England, and north of the Georgia, Alabama, and Mississippi line (except between points lying in the far southern portions and points lying in the far northwestern portions of the territory described) were reduced from 60 cents to 50 cents. At the same time the maximum rates between many of the western states were reduced by about 20% to 25%.

Between 1890 and 1895 the western and southern schedule of "square" rates was replaced by the lower eastern schedule.

From the comprehensive reduction of April 1, 1889, to April 1, 1907, some dozens of sporadic reductions, varying on the whole from 15% to 35%, were made in the maximum "state" rates (including as "state" rates the rates between a state as a whole and an individual city in a distant state), while a number of 37½% reductions in the maximum rates between points in the same state were effected.

During the period prior to 1888, a large number of special rates were introduced, the majority of them affecting traffic between important centers. About 1905 a beginning was made in the direction of eliminating such special rates; and on April 1, 1907, a large number of them were increased to accord with the appropriate "square" and "state" rates. At the same date many "state" rates were also increased by 10 or 15 cents.

On July 1, 1912, a very sweeping reduction in the Western Union "square" rates was made. Prior to this date, the "square" rate from any office to any other office, located within the two zones of squares adjoining its own square, was 25 cents for ten words, and the rate to the next following two zones of squares was 40 cents. On July 1, 1912, the rate to the first zone of 40 cent squares was reduced to 30 cents. This reduction affected the rate from every Western Union office in the United States to every other Western Union office located within the third zone of squares; and, in the aggregate, counting the rate between any two offices affected as one rate, the number of rates reduced was between five and six millions.

* OUTLINE OF THE HISTORY OF ORDINARY DOMESTIC TELEGRAPH RATES IN THE MORE IMPORTANT COUNTRIES OF WESTERN EUROPE.¹¹⁵

Summary.

The history of the domestic telegraph rates, for ordinary service in the more important countries of Western Europe, shows that in but two of these countries (Sweden and The Netherlands) have these rates been changed since October 1, 1894—a period of approximately twenty years. In Sweden the change (June 8, 1906) consisted of merely a reduction in the minimum number of words for which

*In Europe the address and signature of a telegraph message are subject to the regular rates applicable to the text.

payment is required, the actual rate per word remaining exactly as fixed in 1889. In The Netherlands the change (July 1, 1898) effected a reduction only in the rate for words in excess of ten, and thus did not in any way affect messages of ten words or less, which constitute about one-half of the domestic traffic; and the rate for such messages is still the same as in 1886.

With these two exceptions, the most recent rate change was in Denmark, where the rate for the longer hauls was substantially increased on October 1, 1894.

In Germany, the real ultimate effect of the rate change of February 1, 1891, was the elimination of the small fixed charge per message (five cents) which was incorporated in the rate adopted in 1876.

In Great Britain, a general reduction in rates was effected on October 1, 1885, when the present rate was adopted.

In Belgium and in France, the rate has stood without change for over thirty years, the present rates being introduced in 1882 and 1878, respectively.

The dates when the present rate for ordinary domestic service went into effect in each of these countries are shown below:

France	May 1, 1878
Belgium	January 1, 1882
Great Britain.....	October 1, 1885
Germany	February 1, 1891
Denmark	October 1, 1894
The Netherlands.....	July 1, 1898
Sweden	June 8, 1906

Further details follow.

Great Britain.

The rates of the private telegraph companies, which controlled the telegraph business of the country prior to 1870, varied—according to distance—from 1 shilling (24 cents) for 20 words, to 2 shillings (48 cents) for 20 words, additional charges being levied where a message passed over the lines of two or more companies.

In 1870, however, the private telegraph systems were acquired by the state, which immediately adopted a uniform rate of 1 shilling (24 cents) per 20 words, with 3d. (6 cents) for each additional 5 words, *the address and signature being free*.

On October 1, 1885, the above rate was replaced by a rate of 6d. (12 cents) for 12 words and 1½d. (1 cent) for each additional word, *the words in both the address and signature being charged for*. This rate has remained unchanged to the present date.

Germany.

On March 1, 1876, a fixed charge of 20 Pfennig (5 cents) per message, plus 5 Pfennig (1¼ cents) per word, was introduced.

On July 1, 1886, the fixed charge per message of 20 Pfennig (5 cents) was abolished, and a straight charge per word of 6 Pfennig (1½ cents) was substituted.

On February 1, 1891, the charge per word was reduced to 5 Pfennig (1¼ cents), but a minimum of 50 Pfennig (12 cents) per message was required. This is the present rate.

Sweden.

April 1, 1865, marked the adoption of a rate of 1 Krona (26.8 cents) for 20 words and 25 Öre (6.7 cents) for each additional 5 words.

On January 1, 1889, the minimum rate was reduced to 50 Öre (13.4 cents) for 10 words, plus 5 Öre (1.3 cents) for each additional word (instead of 25 Öre for each additional 5 words).

On June 8, 1906, the minimum rate was reduced to 25 Öre (6.7 cents) allowing 5 words. The charge of 5 Öre (1.3 cents) for each additional word remained unchanged—and this is the present rate.

The Netherlands.

On October 1, 1879, a tariff was adopted providing a fixed charge per message of 15 Dutch cents (6 U. S. cents), plus 1 Dutch cent (4/10 U. S. cent) per word.

On July 7, 1886, the rate was changed to 25 Dutch cents (10 U. S. cents) for 10 words and 3 Dutch cents (1.2 U. S. cents) for each additional 2 words.

On July 1, 1898, the present rate was adopted, namely: 25 Dutch cents (10 U. S. cents) for 10 words; 5 Dutch cents (2 U. S. cents) for each additional 5 words up to a total of 50 words; 5 Dutch cents (2 U. S. cents) for each additional 10 words beyond a total of 50 words.

Denmark (Long Distance Service).

October 1, 1894, the rate was increased from:

50 Øre (13.4 cents) for 20 words and
25 Øre (6.7 cents) for each additional 10 words,

to the present rate of:

50 Øre (13.4 cents) for 10 words and
5 Øre (1.3 cents) for each additional word.

Belgium.

No change has been made in the rate as adopted January 1, 1882. This rate is:

50 centimes (10 cents) for 15 words;
10 centimes (2 cents) for each additional 5 words up to a total of 50 words;
10 centimes (2 cents) for each additional 10 words beyond a total of 50 words.

France.

The rate which went into effect on May 1, 1878, stands today. This rate is:

5 centimes (1 cent) per word, a minimum of
50 centimes (10 cents) per message being required.

GOVERNMENT INTERNATIONAL TELEGRAPH RATES FOR ORDINARY SERVICE IN IMPORTANT EUROPEAN COUNTRIES.¹¹⁵

(The countries included are Austria, Belgium, Denmark, France, Germany, Great Britain, The Netherlands, Norway, Sweden, and Switzerland.)

Maximum rates for ordinary international telegraph traffic were established by a general international agreement adopted by the International Telegraph Conference (held in St. Petersburg) as early as 1875. This schedule of maximum rates has been more or less revised by all subsequent International Conferences, which have been held as follows: London 1879; Berlin 1885; Paris 1890; Budapest 1896; London 1903; and Lisbon 1908. The Lisbon (1908) revision is in effect at the present time.

These general international agreements established maximum rates only; the Conference left the individual governments free to fix special reduced rates through special individual agreements, so that, as a matter of fact, in practically all telegraph traffic between adjacent countries, the present rates have been fixed by special agreements, and are lower than the maximum rates established by the general international agreements.

The result is that—according to the international tariff book published by the Office of the International Telegraph Union in 1910, supplemented by such modifications as have occurred since that date—of the 45 separate rates at present in effect between the ten countries here considered (counting the rate between any two countries as a single rate), 24 rates still correspond to the maximum rate allowed under the latest revision of the general international agreement, while 21 rates (those between adjacent countries) are rates established by special agreements.

A brief outline of the history of both these classes of rates, based on the publications of the Office of the International Telegraph Union, follows:

A. Rates Corresponding to the Maximum Allowed under the General International Agreement (Revision of 1908).

Prior to 1885 the international rate schedule adopted by the Conferences was based upon a fixed charge per message plus an additional charge for each word. In the revision of 1885, however, the fixed charge per message was abolished, and all rates were based on a straight word charge. As this basis has been retained in all subsequent revisions, the exact effect of these revisions is apparent from a comparison of the various revised schedules.

First, comparing the schedule of 1885 with the revision of 1903, it is found that of the 24 rates which still correspond to the maximum, 11 had been reduced—by an average of about one cent a word—by the end of the period of eighteen years; whereas 13 rates, or over one-half, not only had not been reduced prior to 1903, but were not reduced even in 1903, so that they remained without change for 23 years (1885-1908).

The revision of 1908 effected moderate reductions all along the line, all but three of the 24 rates being decreased by about one-half a cent a word on the average. A comparison of the 1908 revision with the 1885 schedule, however, shows that 15 of the 24 rates have been reduced by less than one cent a word between 1885 and the present time—a period of approximately 30 years.

B. Rates Fixed by Special Agreement.

As has already been stated, 21 of the present rates between the 10 countries under consideration are the result of special agreements. Of these 21 rates, 13 were fixed prior to 1893, or over 20 years ago, exactly as they exist today.

Of the eight special rates which have been reduced during the past 20 years, three were reduced in 1911 as a result of the joint acquisition of the Great Northern Telegraph Company's England-Norway cables by the governments of Great Britain and Norway, for, coincident with this transaction (January 1, 1911), the rate from England to Norway was reduced from 3d. (6 cents) per word, to 2½d. (5 cents) per word; while before the end of the year, similar reductions had been made in the rate from England to Sweden and to Denmark for the purpose of bringing these rates into line with the rate to Norway.

The changes during the past 20 years in the remaining five special rates have been as follows:

On July 1, 1909, the rate from the frontier zone of Austria to Switzerland was reduced from 10 centimes (2 cents) per word to 9 centimes (1.8 cents) per word.

On May 1, 1902, the rate per word between Norway and Sweden was reduced from 10 Øre (2.7 cents) to 5 Øre (1.4 cents), the fixed charge per message, however, remaining unchanged.

On January 1, 1903, the rate of 5 Øre (1.4 cents) per word (in addition to a fixed charge per message) between the coast of Denmark and the coast of Sweden was extended to include all offices in both countries.

On January 1, 1903, the rate per word between Denmark and Norway was reduced from 10 Øre (2.7 cents) to 5 Øre (1.4 cents), the fixed charge per message remaining unchanged.

In 1901 the rates for words in excess of 50 in messages between Belgium and The Netherlands was reduced from 5 centimes (1 cent) per word to 2½ centimes (½ cent) per word.

APPENDIX G—TABLE I.

COMPARISON OF ORDINARY AND URGENT DOMESTIC TOLL RATES IN FOREIGN COUNTRIES WITH TOLL RATES IN UNITED STATES. RATES FOR 10 MILES ARE IN ALL CASES FOR "TWO-NUMBER" SERVICE; FOR ALL OTHER DISTANCES THEY ARE FOR "PARTICULAR PERSON" SERVICE.

RATES IN CENTS.

180	10 Miles.			25 Miles.			50 Miles.			100 Miles.			200 Miles.			500 Miles.		
	Minutes.			Minutes.			Minutes.			Minutes.			Minutes.			Minutes.		
	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5
Sweden																		
Ordinary	4.0	8.0	8.0	10.7	14.7	14.7	10.7	14.7	14.7	14.7	22.8	22.8	20.1	33.5	33.5	33.5	60.3	60.3
Urgent	8.0	16.1	16.1	14.7	22.8	22.8	14.7	22.8	22.8	22.8	38.8	38.8	33.5	60.3	60.3	60.3	113.9	113.9
Norway																		
Ordinary	4.0	8.0	8.0	8.0	14.7	14.7	12.0	21.4	21.4	25.5	45.6	45.6	32.2	59.0	59.0	..	..	..
Urgent	12.0	24.0	24.0	21.4	41.5	41.5	30.8	58.9	58.9	65.7	126.0	126.0	85.8	166.2	166.2	..	..	..
Denmark																		
Ordinary	6.7	13.4	13.4	13.4	20.1	20.1	16.1	25.4	25.4	26.8	46.9	46.9	46.9	87.1	87.1	..	..	..
Urgent	13.4	26.8	26.8	20.1	33.5	33.5	25.4	44.2	44.2	46.9	87.1	87.1	87.1	167.5	167.5	..	..	..
Germany																		
Ordinary	4.7	9.5	9.5	12.0	17.9	17.9	17.9	29.7	29.7	29.7	53.5	53.5	29.7	53.5	53.5	41.6	77.3	77.3
Urgent	14.3	28.6	28.6	23.8	41.7	41.7	41.7	77.3	77.3	77.3	148.7	148.7	77.3	148.7	148.7	113.0	220.1	220.1
Austria																		
Ordinary	8.1	16.2	16.2	18.3	30.5	30.5	26.4	46.7	46.7	46.7	87.3	87.3	67.0	127.9	127.9	87.3	168.5	168.5
Urgent	24.3	48.6	48.6	42.7	79.3	79.3	67.0	127.9	127.9	127.9	249.9	249.9	188.8	371.5	371.5	249.7	493.3	493.3
France*	4.8	9.6	9.6	10.8	18.0	18.0	10.8	18.0	18.0	18.1	32.6	32.6	30.1	54.2	54.2	66.0	119.0	119.0
Belgium‡	19.3	19.3	19.3	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	24.1	..	..	..	..	..	..
Great Britain†	6.0	12.0	12.0	9.0	15.0	15.0	16.2	28.2	28.2	30.0	54.0	54.0	75.0	135.0	135.0	181.0	326.0	326.0
New Zealand†	6.0	8.0	10.0	9.0	11.0	13.0	16.2	20.2	24.2	30.0	38.0	46.0	60.0	76.0	92.0	..	..	..
United States§	5.0	5.0	5.0	15.0	20.0	25.0	30.0	40.0	50.0	60.0	80.0	100.0	120.0	160.0	200.0	300.0	400.0	500.0
Mean of Foreign Countries																		
Ordinary‡	7.1	11.5	11.8	12.8	18.3	18.7	16.6	25.4	25.8	27.3	44.9	45.8	45.1	78.3	80.3	81.9	150.2	150.2
Urgent‡	2.0	21.4	21.6	19.5	31.9	32.1	27.4	46.8	47.3	49.2	88.8	89.5	79.7	147.4	149.4	134.0	254.5	254.5
% Mean Foreign Rates to United States Rates																		
Ordinary	142	230	236	85	92	75	55	64	52	46	56	46	38	49	40	27	38	30
Urgent	240	428	432	130	160	128	91	117	95	82	111	90	66	92	75	45	64	51

*These are the minimum rates for these distances. In many cases higher rates are in effect. No "particular person" service is given, or which reason 50% of initial rate is added at 25 and 50 miles, and 25% is added for other distances.

‡Increased 25% for distances of 25 miles or more to make comparable with "particular person" rates.

†Increased 50% at 25 miles, 35% at 50 miles and 25% for greater distance to make comparable with "particular person" service.

§These rates are figured on the basis of 6 mills per mile to the nearest higher multiple of 5 cents, except for 10 miles, when the regular "two-number" rate is given. 6 mills per mile is used by Mr. Lewis, and is a fair average rate for the United States.

‡In obtaining the mean ordinary and urgent rates, the rates in France, Great Britain, Belgium, and New Zealand were considered both as ordinary and as urgent.

APPENDIX G—TABLE II.

SHOWING FOREIGN DOMESTIC TOLL RATES IN COMPARISON WITH AMERICAN TOLL RATES.

THIS TABLE DIFFERS FROM TABLE I. PRECEDING, ONLY IN THAT THE RATES HAVE BEEN EQUATED ON THE BASIS

OF THE VALUE OF MONEY AS SHOWN BY WAGES FOR SWITCHBOARD OPERATORS AFTER 3 YEARS'

SERVICE. (SEE APPENDIX E.)

RATES IN CENTS.

	10 Miles.			25 Miles.			50 Miles.			100 Miles.			200 Miles.			500 Miles.		
	Minutes.			Minutes.			Minutes.			Minutes.			Minutes.			Minutes.		
	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5
Sweden																		
Ordinary	10.0	20.0	20.0	26.8	36.8	36.8	26.8	36.8	36.8	36.8	57.0	57.0	50.3	83.8	83.8	83.8	151.0	151.0
Urgent	20.0	40.3	40.3	36.8	57.0	57.0	36.8	57.0	57.0	57.0	97.0	97.0	83.8	151.0	151.0	151.0	284.8	284.8
Norway																		
Ordinary	10.0	20.0	20.0	20.0	36.8	36.8	30.0	53.5	53.5	63.8	114.0	114.0	80.5	147.5	147.5	..	..	..
Urgent	30.0	60.0	60.0	53.5	104.0	104.0	77.0	147.3	147.3	164.3	315.0	315.0	214.5	415.5	415.5	..	..	..
Denmark																		
Ordinary	19.7	39.4	39.4	39.4	59.2	59.2	47.4	74.7	74.7	78.8	138.0	138.0	138.0	256.0	256.0	..	..	..
Urgent	39.4	78.8	78.8	59.2	98.5	98.5	74.7	130.0	130.0	138.0	256.2	256.2	256.0	492.7	492.7	..	..	..
Germany																		
Ordinary	10.2	20.7	20.7	26.1	38.9	38.9	38.9	64.6	64.6	64.6	116.3	116.3	64.6	116.3	116.3	90.4	168.0	168.0
Urgent	31.1	62.2	62.2	51.7	90.7	90.7	90.7	168.0	168.0	168.0	323.3	323.3	168.0	323.3	323.3	245.7	478.5	478.5
Austria																		
Ordinary	24.5	49.0	49.0	55.5	92.4	92.4	80.0	141.5	141.5	141.5	264.6	264.6	203.0	387.6	387.6	264.6	510.6	510.6
Urgent	73.5	147.0	147.0	129.4	240.3	240.3	203.0	387.6	387.6	387.6	757.6	757.6	572.1	1125.8	1125.8	757.6	1495.0	1495.0
France																		
Ordinary	10.7	21.4	21.4	24.0	40.0	40.0	24.0	40.0	40.0	40.2	72.4	72.4	67.0	120.4	120.4	146.7	264.4	264.4
Belgium																		
Ordinary	56.7	56.7	56.7	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	70.9	..	..	..	..	..	..
Great Britain																		
Ordinary	10.9	21.8	21.8	16.4	27.3	27.3	29.5	51.4	51.4	54.5	98.2	98.2	136.4	245.5	245.5	329.0	592.7	592.7
New Zealand*																		
United States																		
Ordinary	5.0	5.0	5.0	15.0	20.0	25.0	30.0	40.0	50.0	60.0	80.0	100.0	120.0	160.0	200.0	300.0	400.0	500.0
Mean of Foreign Rates																		
Ordinary	19.1	31.1	31.1	34.9	50.3	50.3	43.4	66.7	66.7	68.9	116.4	116.4	105.7	193.9	193.9	182.9	337.3	337.3
Urgent	34.0	61.0	61.0	55.2	91.1	91.1	75.8	131.5	131.5	135.1	248.8	248.8	214.0	410.6	410.6	326.0	623.1	623.1
% Mean																		
Foreign Rates to United States Rates																		
Ordinary	382	622	622	233	251	201	145	167	133	115	146	116	88	121	97	61	84	..
Urgent	680	1240	1220	368	455	364	252	329	263	225	311	249	178	256	205	109	156	1..

*No information.

APPENDIX H.

LIST OF REFERENCES AND AUTHORITIES

¹ Annual Report of the Secretary of the Treasury on the Finances, December 2, 1912, page 32. The items given are:

POST OFFICE DEPARTMENT:

Salaries and Expenses.....	\$1,597,691.58
Deficiency in Postal Revenues.....	1,568,194.88
Establishing Postal Savings Depositories.....	287,553.80
Miscellaneous Items	7,791.62
Total—Post Office Department.....	\$3,461,231.88

The amount quoted in the text was obtained by deducting the amount "Deficiency in Postal Revenues" from the Total.

² Public Laws of the United States of America passed by the Sixty-second Congress 1911-1913; Washington 1913. Session III, Chapter 142, 1913. Appropriations used derived from pp. 778, 799, 780, 781, 754, 755.

³ Chapter 143, Session III, Sixty-second Congress; approved March 4, 1913. The items of appropriation check with the detailed list of items of expense given in the Report of the Post Office Department for 1912, pp. 344-346.

⁴ Annual Report of the Supervising Architect for the fiscal year ended June 30, 1912, page 281.

⁵ Annual Report of the Supervising Architect, 1912. The statistics given are obtained by combining, for each class of building, the detailed expenditures given on pages 204 to 217.

⁶ Annual Report of the Supervising Architect, 1912, page 5.

⁷ Annual Report of the Postmaster General, 1913, page 21.

⁸ Annual Report of the Postmaster General, 1913, page 45.

⁹ Annual Report of the Postmaster General, Great Britain, 1912-13, page 92.

¹⁰ Annual Report of the Postmaster General, Great Britain, 1912-13, page 41.

¹¹ Annual Report of the Postmaster General, 1913, page 22.

¹² Annual Report of the Postmaster General, 1913, pp. 21-24.

¹³ Congressional Record, Vol. 41, p. 3,146.

¹⁴ Speech of Representative Hanger, April 29, 1912; reported in Congressional Record, Vol. 48, p. 5,069.

¹⁵ Mr. Julier, before the Walcott Commission. Reported in Congressional Record, Vol. 41, p. 3,150.

¹⁶ Congressional Record, January 17, 1914, p. 1,748.

¹⁷ Letter of Justinian Oxenham, Esq., Secretary of the Postmaster General's Department, of Australia, dated November 17, 1913, transmitting to the Postmaster General a report of the Chief Accountant. Postmaster-General's Department. Balance Sheet on 30th June, 1913, and Financial Statements Showing the Working Results of the Various Branches for the Year 1912-13, Together with Covering Reports by the Secretary and the Chief Accountant. The Parliament of the Commonwealth of Australia, 1913.

¹⁸ Letter from General Post Office, London, dated March 28, 1913.

¹⁹ Translation. Grand-Duché de Luxembourg. Administration des Postes, Telegraphes et Telephones. Renseignements Statistiques pour les Annees 1911 et 1912. Luxembourg, 1913. Page 2, foot-note.

²⁰ Congressional Record, Vol. 51, page 2,124.

²¹ Report of First Assistant Postmaster General for 1913, page 21; 49,614 post offices of the fourth class.

²² Report of the Postmaster General (Great Britain) on the Post Office, 1912-1913. Page 62.

²³ Congressional Record, Vol. 51, page 1,418, next to last paragraph.

²⁴ Information Supplied by the Secretary to the Post Office, 1912 (to the Select Committee on Post Office Servants), pp. 9 and 10.

²⁵ Rapport Presente aux Chambres Legislatives par M. le Ministre des Chemins de Fer, Postes et Telegraphes. (For the year 1911.) Partie C. Bruxelles 1912. Page 22.

²⁶ Journal Telegraphique, Vol. XXXVI, No. 11, November 25, 1912, page 283. Note 9, Belgique.

²⁷ Letter of A. Hamilton, Directeur de la Division Administrative de la Direction Generale des Telegraphes de Suede, dated Stockholm, February 18, 1913.

²⁸ Journal Telegraphique, Vol. XXXVI, No. 11, November 25, 1912, page 282.

²⁹ Idem, page 282, and notes 4 and 5, page 286.

³⁰ Journal Telegraphique, Vol. XXXV, No. 11, November 25, 1911, p. 266; and note 6 under Suisse, p. 270.

³¹ Journal Telegraphique, Vol. XXXV, No. 11, November 25, 1911, p. 262; and notes 7 and 8, Belgique, p. 267.

³² Journal Telegraphique, Vol. XXXV, No. 11, November 25, 1911, p. 266; and notes 5 and 6, Pays-Bas, p. 270.

³³ Journal Telegraphique, Vol. XXXVI, No. 4, April 25, 1912, p. 78; and note 5, Suede, p. 80.

³⁴ Journal Telegraphique, Vol. XXXV, No. 11, November 25, 1911, p. 266.

³⁵ Annual Report of the Post and Telegraph Department for the Year 1910, New Zealand, p. 11.

³⁶ Annual Report of the Post and Telegraph Department for the Year 1912, New Zealand, p. 11.

⁸¹ Journal Telegraphique, Vol. XXXV, No. 11, November 25, 1911, p. 266.

No. of Offices with Permanent Service.....	0.0
No. of Offices with Full or Extended Day Service.....	96
No. of Offices with Limited Day Service.....	
Total	1,963

This information is the latest available, January 27, 1914.

⁸² Journal Telegraphique, Vol. XXXVII, No. 5, May 25, 1913, p. 107.

No. of Offices with Permanent Service.....	5
No. of Offices with Full or Extended Day Service	165
No. of Offices with Limited Day Service.....	1,505
Total	1,675

⁸³ Journal Telegraphique, Vol. XXXVII, No. 11, November 25, 1913, p. 254.

No. of Offices with Permanent Service.....	17
No. of Offices with Full or Extended Day Service	437
No. of Offices with Limited Day Service.....	1,225
Total	1,679

⁸⁴ Journal Telegraphique, Vol. XXXVII, No. 11, November 25, 1913, p. 258.

Sweden.

No. of Offices with Permanent Service.....	46
No. of Offices with Full or Extended Day Service	1,252
No. of Offices with Limited Day Service.....	1,615
Total	2,913

The Netherlands.

No. of Offices with Permanent Service.....	11
No. of Offices with Full or Extended Day Service	250
No. of Offices with Limited Day Service.....	1,216
Total	1,477

Switzerland.

No. of Offices with Permanent Service.....	6
No. of Offices with Full or Extended Day Service	460
No. of Offices with Limited Day Service.....	1,908
Total	2,374

⁸⁵ Bericht der eidgenössischen Telegraphen-und Telephonverwaltung ueber ihre Geschaeftsfuehrung im Jahre 1912. (Switzerland) p. 17.

⁸⁶ Post-und Telegraphen-Nachrichten fuer das Publikum, (Germany) July, 1913, p. 31. British Post Office Guide, January 1, 1914, p. 87. Telegraphen-Tarif, (Austria, Official) July 15, 1911, p. 8. Annuaire de l'Administration des Postes et des Telegraphes de France, pour 1907, p. 115.

⁸⁷ Special Report by E. Y. Gallaher, General Auditor, Western Union Telegraph Company, January 29, 1912. Not published.

⁸⁸ Post Office Department, Annual Reports, 1912, p. 112.

⁸⁹ Report of First Assistant Postmaster General for 1913, p. 21.

⁹⁰ Act of July 12, 1876. Quoted in Senate Report 201, Sixtieth Congress, First Session, 1908, p. 232.

⁹¹ Tarif Telegraphique Etabli le 1er Mai 1911. Published telegraph tariff sheet of the Luxemburg Administration.

⁹² Telegrafreglemente, 1909, Svensk Forfattnings-Samling, 1909. No. 52, p. 7.

⁹³ Relazione intorno ai Servizi Postali, Telegrafici, e Telefonici per l'Esercizio 1909-1910, p. LXI.

⁹⁴ Royaume de Belgique. Tarif Telegraphique, 1er Juillet 1909, p. 6.

⁹⁵ Netherlands: Volledig Tarief voor Telegrammen, 1 Maart 1911, p. 15.

⁹⁶ Determined by the Western Union Telegraph Company in January, 1914, by counting the actual words not charged for in 2,623 telegrams from New York City. Actual average by American count, 11.48 words. The telegrams were selected, in about equal numbers, with reference to those going to large cities and those going to smaller cities and towns. The European count was applied to more than 120 of these telegrams to determine the average difference between the two counts. For telegrams addressed to large cities, the European count is shorter by not more than 1.5 words; and for those addressed to the smaller towns, is shorter by less than .5 words. The difference is due almost entirely to the difference in methods of counting numbers of more than one digit.

⁹⁷ (British) Post Office Guide, No. 231, p. 89.

⁹⁸ Post-und Telegraphen-Nachrichten fuer das Publikum. (Germany) July, 1913, p. 31.

⁹⁹ Annuaire de l'Administration des Postes et des Telegraphes de France, pour 1907, p. 110.

¹⁰⁰ Telegraphen Tarif (Austria, Official), July 15, 1911, p. 4.

¹⁰¹ Reglement de Service International annexe a la Convention Telegraphique Internationale de St Petersburg. Revision de Lisbonne 1908. Articles XIX and XX. This covers international service only, but the practice is general. (See references ⁸³, ⁸⁴, ⁸⁵ and ⁸⁶ above.) Usually no mention is made of the signature and a signature is not required.

- ⁵⁸ For example, in Great Britain. (See British Post Office Guide, No. 231, p. 94.)
- ⁵⁹ Annuaire de l'Administration des Postes et des Telegraphes de France, pour 1907, pp. 115 and 117.
- ⁶⁰ Reglement for den Indenlandske Telegramveksling, Kristiania, 1911, pp. 13 and 21.
- ⁶¹ Hoofdbestuur der Posten en Telegrafie. (The Netherlands) Volledig Tarief voor Telegrammen, pp. 11 and 15.
- ⁶² Telegrafreglemente, 1909. Svensk Forfattnings-Samling, 1909, No. 52, pp. 7 and 17.
- ⁶³ British Post Office Guide, No. 231, p. 86.
- ⁶⁴ Post-und Telegraphen-Nachrichten fuer das Publikum. (Germany) July, 1913, pp. 30 and 32.
- ⁶⁵ Telegraphentarif. Vienna, 1911, pp. 11 and 27.
- ⁶⁶ New Zealand Post and Telegraph Guide, February, 1912, p. 286.
- ⁶⁷ Telegraphen-und Telephon-Handbuch fuer die Schweiz, 1897, p. 25. No change has been made in Swiss telegraph rates in recent years, although it is understood that they are now being revised.
- ⁶⁸ Telegramtakst for Danmark, July 1909, pp. 1 and 5.
- ⁶⁹ Journal Telegraphique, Vol. XXXVII, No. 11, November 25, 1913, pp. 254 and 258 (Belgium, traffic and revenue from "expres postaux" excluded).
- ⁷⁰ Journal Telegraphique, Vol. XXXVI, No. 11, November 25, 1912, p. 281 and notes thereto. Mr. Lewis' figure is in error, largely due to the inclusion of 10,324,821 pneumatic messages, and the corresponding revenue of 4,607,482 francs. These partake of the nature of local mail messages and not of electrically transmitted telegrams.
- ⁷¹ Journal Telegraphique, Vol. XXXVII, No. 5, May 25, 1913, p. 107. Revenue does not include miscellaneous receipts (except for Russia).
- ⁷² Sveriges Officiella Statistik. Telefon och Telegraf ar 1912 av Kungl. Telegrafstyrelsen, Stockholm, 1913, pp. 10, 13 and 14.
- ⁷³ Report of the Postmaster-General on the Post Office, 1912-1913 (Great Britain), pp. 15 and 34.
- ⁷⁴ Journal Telegraphique, Vol. XXXVII, No. 11, November 25, 1913, p. 257. The traffic includes messages from railroad stations, but the revenue does not include the receipts from such messages.
- ⁷⁵ Statistik des Oesterreichischen Post-und Telegraphenwesens im Jahre 1912, Vienna, 1913, pp. 6 and 8.
- ⁷⁶ Schweizerische Post-Telegraphen-und Telephon-Statistik 1912, pp. 58, 68 and 69.
- ⁷⁷ Journal Telegraphique, Vol. XXXVII, No. 11, November 25, 1913, p. 257. Revenue does not include miscellaneous receipts.
- ⁷⁸ Telegraphentarif, Vienna, 1911.
- ⁷⁹ Royaume de Belgique. Administration des Telegraphes. Tarif Telegraphique, July 1, 1909.
- ⁸⁰ Decomposition des Taxes du Tableau A, Annexe au Reglement du Service Telegraphique International (Revision de Lisbonne). Bureau International de l'Union Telegraphique, Berne, 1910.
- ⁸¹ Post-und Telegraphen-Nachrichten fuer das Publikum (Germany), July, 1913, p. 30.
- ⁸² British Post Office Guide, No. 231, pp. 871 and 872.
- ⁸³ The facts concerning the duplication in counting international messages are apparent from the "Journal Telegraphique" statistics and the annual reports of the various administrations. Commercial telegraph traffic is usually divided into the following classes: (1) internal; (2) international received; (3) international sent; and (4) international transit. The facts concerning the division of receipts from all European international commercial telegrams are given in "Decomposition des Taxes du Tableau A Annexe au Reglement du Service Telegraphique International (Revision de Lisbonne), Berne, Bureau International de l'Union Telegraphique, 1910."
- ⁸⁴ Statstelegrafvaesenet. Telegramtakst for Danmark, July 1909.
- ⁸⁵ Volledig Tarief voor Telegrammen, 1911.
- ⁸⁶ Telegraphen Tarif (Official Tariff Sheet), September, 1911.
- ⁸⁷ Statistical Abstract of the United States, 1912, p. 22. Does not include Alaska, Canal Zone, or Island Possessions.
- ⁸⁸ Areas for foreign countries are taken from Official Year Book of the Commonwealth of Australia, 1913, p. 48, and have been checked with those given in Geographisch-Statistische Tabellen Aller Laender der Erde, compiled by Dr. Franz von Juraschek, 1913.
- ⁸⁹ Map measurements from Rand-McNally Indexed Atlas of the World, Vol. II., Foreign Countries, 1908. The maximum air line distances are taken from the texts associated with the maps, when stated.
- ⁹⁰ Western Union Telegraph Company. The averages are made up as follows:

Average Length of Haul for Various Classes of Western Union Messages.

Day messages	496 miles
Day letters	797 "
Night messages	797 "
Night letters	1,025 "
Day press messages.....	432 "
Night press messages.....	485 "
Average of all messages.....	573 "

38,564 messages originating at New York, Chicago, and San Francisco were analyzed to obtain these statistics.

- ⁹¹ Letter of Director General of Telegraphs of Belgium, dated November 30, 1912: "The average haul has been established only in the case of private (commercial) domestic telegrams. It is 68,481 kilometers (42.5 miles)." (Translation.)
- ⁹² Journal Telegraphique, Vol. XXXVII, No. 11, November 25, 1913, p. 254. (Derived.)
- ⁹³ Special study of Western Union Telegraph Company's traffic from Amsterdam, Cohoes, Fort Edward, Glens Falls, Hudson, Hudson Falls, Kingston, Newburgh, Saugerties, Schenectady, and Troy for the month of August, 1912.

- ¹¹⁹ Congressional Record, December 22, 1913, p. 1,425.

¹²⁰ The following table shows how these population statistics were computed and the sources:

POPULATION

Country.	Last Census.	Preceding Census.	Increase Per Annum.	Estimated Population (1912).
Austria*	28,571,934 (1910)	26,150,708 (1900)	242,123	29,056,000
Belgium*	7,423,784 (1910)	6,693,548 (1900)	73,024	7,570,000
Denmark*	2,757,000 (1911)	2,589,000 (1906)	33,600	2,790,000
France*	39,601,509 (1911)	.....	.....	39,601,509 (1911)
Germany*	64,925,993 (1910)	60,641,489 (1905)	856,900	66,640,000
Great Britain*	46,122,463 (1912)	.....	.....	46,122,463
Hungary*	20,886,487 (1910)	19,254,559 (1900)	163,193	21,213,000
Italy*	34,671,377 (1911)	32,475,000 (1901)	219,600	34,890,000
Luxemburg*	259,891 (1910)	236,543 (1900)	2,335	264,561
Netherlands*	6,022,000 (1911)	5,263,000 (1901)	75,900	6,077,900
Norway*	2,391,782 (1910)	2,240,033 (1900)	15,175	2,422,132
Sweden†	5,604,192 (1912)	.....	.....	5,604,192
Switzerland*	3,753,293 (1910)	3,315,443 (1900)	43,785	3,840,836
New Zealand‡	1,071,000 (1912)	.....	.....	1,071,000
Australia‡	4,669,000 (1912)	.....	.....	4,669,000
United States .....	.....	.....	.....	96,299,000

*Geographisch-Statistische Tabellen Aller Laender der Erde, Dr. Franz von Juraschek, for the respective years.

‡Official Year Book of the Commonwealth of Australia.

‡Statistical Abstract of the Principal and Other Foreign Countries, Thirty-eighth Number, London, 1913.

†Sveriges Officiella Statistik. Telefon och Telegraf ar 1912 av. Kungl. Telegrafstyrelsen, p. 40.

¹²¹ Statistik des Oesterreichischen Post-und-Telegraphenwesens im Jahre 1912. Vienna, 1913, pp. 124 and 125. Covers statistics of letters and postcards for all European countries. Statistics for France obtained from same source 1912.

¹²² Includes domestic and foreign sent. Authorities: letter from Office of Third Assistant Postmaster General, December 22, 1913, and letter from Office of Second Assistant Postmaster General, December 23, 1913.

¹²³ Journal Telegraphique, Vol. XXXVII, No. 11, November 25, 1913, pp. 254-258.

¹²⁴ Journal Telegraphique, Vol. XXXVII, No. 5, May 25, 1913, pp. 104-107.

¹²⁵ Great Britain. Report of the Postmaster General on the Post Office, 1912-1913, p. 1.

¹²⁶ Idem, pp. 15 and 68 (derived).

¹²⁷ Journal Telegraphique, Vol. XXXVI, No. 11, November 25, 1912, p. 281.

¹²⁸ Australia. Postmaster General's Department. Second Annual Report, 1911-1912, p. 17.

¹²⁹ Statistik des Oesterreichischen Post-und-Telegraphenwesens im Jahre 1912, Vienna, 1913, p. 7.

¹³⁰ Bericht der eidgenoessischen Telegraphen-und Telephonverwaltung ueber ihre Geschaeftsfuehrung im Jahre 1912, p. 28. Does not include inward international messages.

¹³¹ These statistics have been compiled, except as noted, from unpublished advices from the various governments. In some cases (particularly as to Norway private, Italy, and parts of the British system) estimates based on the number of calls per station in recent years have been multiplied by the mean number of stations for 1912, as officially reported.

¹³² Grande-Duche de Luxembourg. Administration des Postes, Telegraphes, et Telephones. Renseignements Statistiques pour les Annees 1911 et 1912, p. 41.

¹³³ Journal Telegraphique, Vol. XXXVII, No. 5, May 25, 1913, pp. 104 and 105.

¹³⁴ Journal Telegraphique, Vol. XXXVII, No. 11, November 25, 1913, p. 254.

German Empire:

No. of Offices with permanent service.....	621
No. of Offices with full or extended day service.....	8,574
No. of Offices with limited day service.....	38,972

Total 48,167

Austria:

No. of Offices with permanent service.....	58
No. of Offices with full or extended day service.....	396
No. of Offices with limited day service.....	4,263
Total	4,717

Hungary:

No. of Offices with permanent service.....	59
No. of Offices with full or extended day service.....	707
No. of Offices with limited day service.....	4,228
Total	4,994

¹²⁹ Journal Telegraphique, Vol. XXXVII, No. 5, May 25, 1913, p. 106.

No. of Offices with permanent service.....	218
No. of Offices with full or extended day service.....	502
No. of Offices with limited day service.....	13,351
Total	14,071

¹³⁰ Journal Telegraphique, Vol XXXVI, No. 11, November 25, 1912, p. 281.

No. of Offices with permanent service.....	21
No. of Offices with full or extended day service.....	1,131
No. of Offices with limited day service.....	20,244
Total	21,396

¹²⁷ Western Union Telegraph Company—prepared for this report. Total number of offices—36,395.

¹²⁸ Great Britain. Report of the Postmaster General on the Post Office, 1912-13, p. 15.

¹²⁹ Message du Conseil federal a l'Assemblee federale concernant le relevelement des taxes telephoniques (Du 20 Decembre, 1909), p. 27.

¹⁴⁰ Number of post offices from Postmaster General's Department. Second Annual Report 1911-1912, p. 6. Number of telegraph offices from Journal Telegraphique, Vol. XXXVII, No. 5, May 25, 1913, pp. 104-105.

¹⁴¹ Statistics and statements on the number of telephone employees from Journal Telegraphique, Vol. XXXVI, No. 7, July 25, 1912:

Norway, page 155 and note 15, page 161.

Belgium, page 150 and notes 11, 12, 15, and 16, page 158.

Sweden, page 156, and notes 9, 10, and 11, page 164.

Switzerland, page 157 and note 13, page 164.

Netherlands, page 155 and notes 8 and 9, page 162.

France, page 152 and note 1, page 159.

Italy, employees and traffic, page 153.

¹⁴² Journal Telegraphique, Vol. XXXVI, No. 7, July 25, 1912, p. 150; note 21, p. 158. Each international message has been counted as one without regard to the units of time used.

¹⁴³ Rapport par M. le Ministre des Chemins de Fer, Postes, et Telegraphes. Partie C. Telegraphes et Telephones. Bruxelles, 1911, pp. 12 and 29.

¹⁴⁴ Translation. Special notes on the form "Bureau International de l'Union Telegraphique. Statistiques des Telephones."

¹⁴⁵ Sveriges Officiella Statistik. Telefon och Telegraf ar 1911 av Kungl. Telegrafstyrelsen, p. 7.

¹⁴⁶ Compiled from the list of telephone exchanges and associated information in the New Zealand Post Office Guide, February, 1912, pp. 434-438.

¹⁴⁷ Directions for Long Distance Service over Government Lines in the Telephone Directory (1914) of the Copenhagen Telephone Company.

¹⁴⁸ Letter from the Norwegian Telegraph Administration, April 20, 1911.

¹⁴⁹ Telephone Directory (State System) for Stockholm, 1913.

¹⁵⁰ Prepared from a list of central offices and switching stations published in the Telephone Directory (State System) for Stockholm, 1913. The statement concerning the total number of central offices and switching stations is found in "Telefon och Telegraf ar 1912 av Kungl. Telegrafstyrelsen."

¹⁵¹ Guide des Correspondances Telephoniques en Belgique, Septembre, 1910.

¹⁵² These statistics of investment were derived as follows:

Austria:

Number of Telephones: Statistik des Oesterreichischen Post- und Telegraphenwesens im Jahre 1912, Vienna 1913, p. 7.

Telephone Investment: Letter of Post and Telegraph Administration, Vienna, dated December 15, 1913.

Belgium:

Letter of Director General of Telegraphs, Brussels, September 19, 1913.

France:

Letter of Direction de l'Exploitation Telephonique, Paris, October 28, 1913.

German Empire:

Number of Telephones: Letter of Imperial Post Office, Berlin, August 15, 1913.

Telephone Investment: Imperial Postal Area, \$206,400,000—Archiv fuer Post und Telegraphie, Berlin, September 1913, p. 558.

Bavaria—\$18,554,000. Letter of K. Bayerisches Staatsministerium fuer Verkehrsangelegenheiten (Postabteilung), Munich, July 3, 1913.

Wurttemberg—\$7,583,000. Letter of Generaldirektion der K. Wurt. Posten und Telegraphen, Stuttgart, September 12, 1913.

Hungary:

Letter of Administration of Posts and Telegraphs, Budapest, August 6, 1913.

Luxemburg:

Letter of Administration des Postes et des Telegraphes, Luxemburg, October 16, 1913.

Australia:

Number of Telephones: Letter of Secretary, Postmaster-General's Department, Melbourne, September 18, 1913.

Telephone Investment: Postmaster-General's Department. Balance Sheet on June 30, 1913, p. 23. Represents the value of the item "Telephone Lines and Equipment" on June 30, 1913, but excludes all real estate.

Switzerland:

Number of Telephones: Bericht der eidgenoessischen Telegraphen-und Telephonverwaltung ueber ihre Geschaefsfuehrung im Jahre 1909, p. 58.

Telephone Investment: Ergaenzender Bericht des Bundesrates an die nationalraetliche Kommission zur Vorlage betreffend die Erhoehung der Telephongebuehren (vom 21 Maerz 1911).

Tabelle 3, plus additional investment since 1909, as stated in a letter of the Director General of Telegraphs, dated June 18, 1913.

²⁰³ Traffic obtained from Bericht der eidgenoessischen Telegraphen-und Telephonverwaltung ueber ihre Geschaefsfuehrung im Jahre 1911, p. 28. Revenue obtained from a letter of the Director of Telegraphs, Berne, June 18, 1913, supplemented by the Journal Telegraphique, Vol. XXXVII, No. 7, July 25, 1913, p. 159.

²⁰⁴ Foreign References:

Christiania: Number of Telephones: Norges Officielle Statistik V. 191. Norges Telegrafvaesen 1911-1912, p. 30.

Rates: Pristarif for Kristiania telefonanlaeg.

The Hague: Number of telephones: Verslag betreffende den Telephoondienst der Gemeente 's-Gravenhage over 1912, p. 7.

Rates: The maximum rate includes an "entrance" fee of \$10. The minimum rate includes an "entrance" fee of \$8. There are quoted also rates somewhat lower, but which are apparently obsolete or special as there is practically no development at those rates.

Reference: Tarief van den Gemeentelijken Telephoondienst. Taken from a recent subscribers' directory.

Tokio: Number of telephones: Letter of Director General of Posts and Telegraphs, November 29, 1912.

Rates: (Japanese) Post Office Guide (English Edition), April 1, 1911, pp. 213 and 214. Rates include an "entrance" fee.

Auckland: Number of telephones: New Zealand. Annual Report of the Post and Telegraph Department for the Year 1912, p. 46.

Rates: Post and Telegraph Guide, New Zealand, February, 1912, pp. 439-441. These rates include an "entrance" fee.

Amsterdam: Number of telephones: Jaarverslag betreffende den Telefoondienst der Gemeente Amsterdam over 1911, p. 5.

Rates: Telephone Tariff Sheet of Municipality of Amsterdam. Rates include an "entrance" fee.

Rotterdam: Number of telephones: Verslag omtrent den toestand van den Gemeentelijken Telefoondienst te Rotterdam over het jaar 1912.

Rates: Tariff from a subscribers' directory. Rates include "entrance" fees.

Budapest: Number of telephones: Official Report of the Department of Posts, Telegraphs and Telephones for 1912, p. 59.

Rates: Les Tarifs Telephoniques, Bureau International des Administrations Telegraphiques, 2nd Edition, Berne, 1905, p. 222.

Paris: Number of telephones: Letter from Direction de l'Exploitation Telephonique, September 19, 1913.

Rates: Telephones, Postes et Telegraphes, Renseignements Pratiques. Issued by Association des Abonnes au Telephone, Paris, p. 8. Does not include the telephone instrument which must be purchased by the subscriber.

Statistics of number of telephones taken from the following sources:

Berne: Bericht der eidgenoessischen Telegraphen-und Telephonverwaltung ueber ihre Geschaeftsfuehrung im Jahre 1912, p. 39.

Brussels: Letter of the Director General of Telegraphs, September 19, 1913.

Sydney: Estimated for 1912 by W. H. Gunston in (London) Post Office Electrical Engineers' Journal, Vol. 6, part 2, July, 1913, p. 167.

Rome: State System only. Relazione sui Servizi Affidati all' Amministrazione Telefonica, May 11, 1913, pp. 64 and 68.

Vienna: Letter of the Technical Division of the Administration of Posts and Telegraphs, Vienna, December 15, 1912.

Berlin: Letter of the Imperial Post Office, Berlin, August 15, 1913.

Paris: Letter of Direction de l'Exploitation Telephonique, Paris, September 19, 1913.

Copenhagen: Letter of Copenhagen Telephone Company, Copenhagen, April 22, 1913.

¹²⁶ Bestimmungen fuer die Benutzung der Fernsprechanschliesse (Official) Berlin, 1910, p. 20. This has been confirmed by official correspondence.

¹²⁷ Compiled chiefly from official reports included in exchanges of correspondence between the various foreign governments and the American Telephone and Telegraph Company. In the cases of Hungary, Italy, Sweden, and Switzerland the published reports of the Administration state the number of telephones in the larger exchanges at least; and the total number of telephones is given in the official annual reports of the Administrations, excepting Germany (triennially) France, Belgium, and The Netherlands.

¹²⁸ These unit revenues are computed by dividing the mean of the number of telephones at the beginning and at the end of the fiscal year into the exchange revenue for the year as officially reported. The sources for the data as to the number of telephones and as to revenues are as follows:

Austria: Number of telephones: Statistik des Oesterreichischen Post-und Telegraphenwesens im Jahre 1912, p. 7. Revenue, idem, p. 91.

Belgium: Both telephones and revenue: Letters of Director General of Telegraphs, September 19, 1913, and July 23, 1912.

France: Telephones and revenue: Letter of Direction de l'Exploitation Telephonique, Paris, October 28, 1913.

Great Britain: Number of telephones: mean of the number of telephones on March 31, 1912, and on March 31, 1913, from Report of the Postmaster General, 1912-1913, p. 69.
Revenue: Obtained from provisional accounts in the Postmaster General's Report, 1912-1913,

Great Britain: Number of telephones: mean of the number of telephones on March 31, 1912, and on March 31, 1913, from Report of the Postmaster General, 1912-1913, p. 69.
Revenue: Obtained from provisional accounts in the Postmaster General's Report, 1912-1913, pp. 23 and 95, as follows:

Total Exchange and Toll Revenue.....	£5,746,924
Total Toll (trunk) Revenue.....	949,439
Derived for Exchange Revenue.....	£4,797,485

Hungary: Letter of the Administration of Telegraphs, Budapest, September 2, 1913.

Switzerland: Number of telephones: Bericht der eidgenoessischen Telegraphen-und Telephonverwaltung ueber ihre Geschaeftsfuehrung im Jahre 1912; also 1911.

Revenue: Schweizerische Post-Telegraphen-und Telephon Statistik 1912, pp. 74 and 75.

New Zealand: Number of telephones and revenue: Annual Report of the Post and Telegraph Department for the year 1912, pp. 45 and 50.

Australia: Number of telephones: Letter of Secretary, Postmaster General's Department, Melbourne, September 18, 1913.

Revenue: Postmaster General's Department. Balance Sheet on 30th June, 1913, p. 26.

¹²⁹ Telephonordnung und Telephontarif, Vienna, 1913, p. 7.

¹³⁰ Bestimmungen fuer die Benutzung der Fernsprechanschliesse, Berlin, 1910, pp. 20-23.

¹³¹ Translation. Deutsche Verkehrs-Zeitung, 21 Februar 1913. Die Zweite Beratung des Postetats im Reichstage. Sitzung vom 15 Februar 1913.

¹³² Letter from General Post Office, Great Britain, November 27, 1911.

¹³³ No. 189 Senat. Rapport Fait au nom de la Commission des Finances Chargee d'examiner le projet de loi, adopte par la Chambre des Deputes, portant fixation du Budget General de l'exercice 1911, p. 94.

¹³⁴ No. 35, Senat, Annee 1912. Rapport Fait au nom de la Commission des Finances chargee d'examiner le projet de loi, adopte par la Chambre des Deputes, portant fixation du Budget General de l'exercice 1912, p. 39.

¹³⁵ From a copy of the Telephone Regulations forwarded by the Postmaster General's Department, March 3, 1911.

¹³⁶ In preparing this table, the statistics given in the table in (2) next above were used. In equating the rates, the statistics of telephone operators' wages given in Appendix E were used.

¹³⁷ The following are the sources for the data on telephone operators' wages:

Austria: Letter of the Handelsministerium, Vienna, dated January 28, 1913.

Belgium: Letter of the Director General of Telegraphs, Brussels, September 9, 1912.

Denmark: Letter of the Copenhagen Telephone Company, Copenhagen, received July 22, 1912.

France: Letter of the Direction de l'Exploitation Telephonique, Paris, February 1, 1913.

German Empire: Letter of the Imperial Post Office, Berlin, January 10, 1913.

Great Britain: Letter of General Post Office, London, January 20, 1913.

Netherlands: Annales des Postes, Telegraphes et Telephones, Mars 1913, page 460.

Norway: Letter of the Administration of Telegraphs, Christiania, January 7, 1913.

Sweden: Letter of Direction General of Telegraphs, Stockholm, March 26, 1913; also letter of Stockholm Telephone Company, January 23, 1913.

Switzerland: Letter of Obertelegraphendirektion, Berne, January 8, 1913.

¹⁶⁸ Les Tarifs Telephoniques, Bureau International des Administrations Telegraphiques, Berne, 1905, p. 242.

¹⁶⁹ Idem, p. 194.

¹⁷⁰ Telefonordnung und Telephontarif, Vienna, 1910.

¹⁷¹ Les Tarifs Telephoniques, Bureau International des Administrations Telegraphiques, Berne, 1905, p. 295.

¹⁷² Idem, p. 127.

¹⁷³ (Japanese) Post Office Guide (English Edition), p. 226.

¹⁷⁴ Substantiated by New Zealand Post and Telegraph Guide, February, 1912, p. 442.

¹⁷⁵ Les Tarifs Telephoniques, Bureau International des Administrations Telegraphiques, Berne, 1905, pp. 242 and 243; and a letter of the Administration of Telegraphs, Christiania, April 20, 1911, concerning certain changes in the charges for particular person service.

¹⁷⁶ Les Tarifs Telephoniques, pp. 295 and 296.

¹⁷⁷ Idem, pp. 127-129.

¹⁷⁸ Bestimmungen fuer die Benutzung der Fernsprechanschluesse, pp. 19 and 20.

¹⁷⁹ Telefonordnung und Telephontarif, Vienna, 1910, pp. 52, 81-83.

¹⁸⁰ This information is derived as follows:

Norway and France, see ¹⁶⁸ above.

Austria, see ¹⁷⁰ above.

Sweden, see ¹⁷¹ above.

Denmark, see ¹⁷² above.

New Zealand, see ¹⁷⁴ above.

Germany, see ¹⁷⁸ above.

Belgium: Les Tarifs Telephoniques, Bureau International des Administrations Telegraphiques, Berne, 1905, p. 113.

Great Britain: Post Office Guide, No. 231, p. 107.

¹⁸¹ Bericht der eidgenoessischen Telegraphen-und Telephonverwaltung ueber ihre Geschaeftsfuehrung im Jahre 1912, p. 28.

¹⁸² Les Tarifs Telephoniques, Bureau International des Administrations Telegraphiques, Berne, 1905.

¹⁸³ Letter of Office of the Engineer-in-Chief, General Post Office, London, July 26, 1906.

¹⁸⁴ Letter of the Imperial Post Office, Berlin, October 27, 1906.

¹⁸⁵ Letter from the Telegraph Administration, received January 4, 1907.

¹⁸⁶ Report of the Debate on the Budget, Deutsche Verkehrs-Zeitung, February 28, 1913.

¹⁸⁷ Letter from an official of the Danish State Telephone Service, August 15, 1906.

¹⁸⁸ No. 35 Senat. Rapport Fait au nom de la Commission des Finances, chargee d'examiner le projet de loi, adopte par la Chambre des Deputes, portant fixation du Budget General de l'exercice 1912. Par M. Emile Dupont, Senateur. Paris, 1912, pp. 63-69.

¹⁸⁹ Postmaster-General's Department. Balance Sheet on 30th June 1913, pp. 27 and 28.

¹⁹⁰ The source of the population statistics is given in ¹⁸⁰ above. The sources and method of arriving at the statistics of interurban conversations are as follows:

Austria: Statistik des Oesterreichischen Post-und Telegraphenwesens im Jahre 1912, Vienna, 1913, p. 7. Conversations—6,254,765 reduced 20% to eliminate duplications in accordance with note below.

Belgium: Letter of Director General of Telegraphs, Brussels, September 19, 1913. Conversations 2,251,954. These are actual conversations (not rate periods used), but include 594,106 outward and inward international conversations. Half of the total international or 297,053 assumed to be inward, and deducted from the above total, giving 1,954,901 as the number of actual conversations.

France: Journal Telegraphique, Vol. XXXVII, No. 7, July 25, 1913, p. 155. Conversations—34,948,877, reduced by 6,989,975, in accordance with note below.

Great Britain: Report of the Postmaster General on the Post Office, 1912-1913. Total conversations—36,019,086 (p. 69). Total inland 35,815,959 (p. 23). Difference equals 203,127 international inward and outward. Deduct one-half (101,563) from total, remainder is total originating interurban messages. Each conversation regardless of length, is counted as one message, so that no further reduction is necessary.

Hungary: Journal Telegraphique, Vol. XXXVII No. 7, July 25, 1913, p. 155. Total conversations—2,391,434, reduced 20% in accordance with the note below.

Italy: Journal Telegraphique, Vol. XXXVI No. 7, July 25, 1912, p. 153. State: 2,892,880; Company: 1,511,252; Total: 4,404,132, reduced by 20% in accordance with the note below.

Netherlands: Verslag aan de Koningin betreffende den dienst der Posterijen, der Telegrafie, en der Telefonie in Nederland, 1912, pp. 271 and 273. Domestic: 5,865,072; International inward and outward: 752,403; Outgoing international, taken as 376,201, added to domestic gives 6,241,274. Reduced by 20% in accordance with the note below.

8. Total: 4,989,912, of which 61,972 are *inward* international, leaving net total of 4,927,940 conversations (not units). Company: Journal Telegraphique, Vol. XXXVII, No. 7, July 25, 1913, p. 157. Total: 4,148,086. Probably *units*, but no deduction made. There is probably a large duplication for messages passing over both private and government lines.

Sweden: Sveriges Officiella Statistik. Telefon och Telegraf ar 1912 av Kungl. Telegrafstyrelsen, p. 7-8. Total: 18,381,940; deduct 137,599 inward and transit international, net: 18,244,341 conversations, not units.

Switzerland: Bericht der eidgenoessischen Telegraphen-und Telephonverwaltung ueber ihre Geschaeftsfuehrung im Jahre 1912, p. 28. Total domestic: 11,996,565; Outward international: 408,369; Total: 12,404,934. Deduct 20% as per note below.

New Zealand: Annual Report of the Post and Telegraph Department for the Year 1912. Total telegraph and toll revenue, including miscellaneous receipts: £321,951 (p. 37). Total receipts from paid telegrams: £313,960. Difference equals toll revenue plus miscellaneous telegraph and telephone receipts: £7,991. Minimum toll rate: 3d. (6 cents), divided into £7,991 gives 648,070 messages. Since miscellaneous revenue is included, and since average revenue per conversation must be much in excess of the minimum rate, due to longer haul conversations and to overtime, the number of conversations must be very much less than the number which has been used.

Australia: Journal Telegraphique, Vol. XXXVII, No. 7, July 25, 1913, pp 150 and 151. Does not include Tasmania. No deductions made.

Note.—The method of counting interurban conversations prescribed by the International Telegraph Bureau is to count as one message each unit rate period of time, or fraction thereof, used in a conversation. See¹⁰⁰ above. This results in increasing the number of conversations for reporting purposes from 30% to 100%, for which reason in deriving the statistics used above a deduction of 20% from the reported statistics is considered conservative. In the United States, the percentage of total conversations extending beyond three minutes is from 18% for very short hauls to more than 50% for long hauls. In Sweden, the number of rate periods is from 27% to 32% in excess of the number of actual conversations. (See reference¹⁰⁰ above).

United States: The number of originating toll and long distance messages of the Associated Bell Telephone Companies, of companies merged during the year with Associate Companies, of controlled connecting companies (including companies merged therewith) was, in 1912, 246,388,743. The number of stations of other companies (i. e., independent and non-controlled connecting companies) was 3,868,345. The Special Report of the Census Bureau on Telephones 1907 stated that the average number of toll and long distance messages per station of such companies was 26. For purposes of estimate, this average has been reduced to 20 per station and multiplied by the number of stations given above. This gives a total of 77,366,900 toll and long distance messages for independent and non-controlled companies for 1912, making the total for the United States: 323,755,643 in 1912.

¹⁰¹ The authorities and sources for this information are as follows:

POPULATION:

As given in reference ¹⁰⁰ above, except for France, for which one year's growth has been estimated.

TELEPHONES:

Austria: Statistik des Oesterreichischen Post-und Telegraphenwesens im Jahre 1912. Vienna 1913, p. 7.

Belgium: Letter of Director General of Telegraphs, Brussels, September 19, 1913.

Denmark: Letter of Direction of Telegraphs, Copenhagen, October 20, 1913.

France: Letter of Direction de l'Exploitation Telephonique, Paris, October 28, 1913.

Germany: Letter of the Imperial Post Office, Berlin, August 15, 1913.

Great Britain—Municipal Systems: Hull, Letter of Corporation Telephone Department, September 13, 1913; Portsmouth, "The Portsmouth Telephone Exchange Accounts, Year Ending March 31, 1913," p. 8; States of Guernsey, "Guernsey States Telephone Department Balance Sheet, Revenue Statement and Statistics for Year Ended December 31, 1912," p. 7.

Post Office: Report of the Postmaster-General on the Post Office, 1912-13, p. 69.

Hungary: Letter of the Telegraph Administration, Budapest, September 2, 1913.

Luxemburg: Administration des Postes, Telegraphes, et Telephones. Renseignements Statistiques pour les Annees 1911 et 1912, p. 40.

Netherlands: Letter of Direction General of Posts and Telegraphs, The Hague, August 7, 1913, supplemented by Verslag betreffende den Telephoondienst der Gemeente's-Gravenhage over 1912, p. 7; and Verslag omtrent den toestand van den Gemeentelijken Telefoondienst te Rotterdam over het jaar 1912, p. 37.

Norway: This is an estimate for January 1, 1913, on the basis of the official statistics for June 30, 1912, for the State System, and 1910 for the private systems, as given in Norges Officielle Statistik. Norges Telegrafvaesen 1911-1912, pp. 30 to 32; and 36.

Sweden: Sveriges Officiella Statistik. Telefon och Telegraf ar 1912 av Kungl. Telegrafstyrelsen, pp. 9 and 32.

Switzerland: Bericht der eidgenoessischen Telegraphen-und Telephonverwaltung ueber ihre Geschaeftsfuehrung im Jahre 1912, p. 58.

New Zealand: Annual Report of the Post and Telegraph Department for the Year 1912, p. 50.

Australia: Letter of the Secretary, Postmaster-General's Department, Melbourne, September 18, 1913.

¹²² The authorities and sources of this information are as follows:

TELEPHONES:

London: Letter of General Post Office, London, September 30, 1913.

Paris: Letter of Direction de l'Exploitation Telephonique, Paris, September 1913.

Berlin: Letter of Imperial Post Office, Berlin, August 15, 1913.

Vienna: Letter of Technical Division, Post and Telegraph Administration, December 15, 1913.

Glasgow: See *London*.

Hamburg-Altona: Same as *Berlin*.

Budapest: Annual Report of Post and Telegraph Department for the Year 1912, p. 59.

Brussels: Letter of Director General of Telegraphs, Brussels, September 1913.

Munich: Letter of Ministry of Communications, Post Office Division, Munich, July 3, 1913.

Leipzig: Same as *Berlin*.

Copenhagen: Letter of the Copenhagen Telephone Company, Copenhagen, April 22, 1913.

Dresden: Same as *Berlin*.

Marseilles: Same as *Paris*.

Breslau: Same as *Berlin*.

Lyons: Same as *Paris*.

Antwerp: Same as *Brussels*.

Liege: Same as *Brussels*.

Chemnitz: Same as *Berlin*.

Stockholm: Sverige Officiella Statistik. Telefon och Telegraf ar 1912 av Kungl. Telegrafstyrelsen, p. 40.

Triest: Same as *Vienna*.

Ghent: Same as *Brussels*.

POPULATION:

Taken from authoritative sources; in some cases given by officials in correspondence; and in some cases partly estimated.

¹²³ Number of telephones in most cases obtained by correspondence with government officials.

¹²⁴ Preliminary Report of the Joint Commission on Business Method of Post Office Department and Postal Service, Senate Report No. 201, 60th Congress, 1st Session, p. 119:—

"In this connection we might call attention to the following extract from a letter addressed under date of January 14, 1907, by the Secretary of State to the Speaker of the House of Representatives in connection with the special weighing of penalty matter originated in the Department of State from July 1 to December 31, 1906:

"It is proper to point out that the computation of cost is deceptive, inasmuch as, were the franking privilege discontinued, the greater portion in weight of third-class matter would not be sent by mail, but would be forwarded by other and cheaper means of transportation."

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Reprinted from the Metropolitan, December, 1914

AUG 3 1915

Shall the Government Own the Telephones and the Telegraphs?

(A Reply to the interview with Congressman David J. Lewis Published in the August 1914 *Metropolitan*)
By the Statistical Department of the American Telephone and Telegraph Company.

Strange as it may seem, the people who would be most vitally affected by a change from private to public ownership of telephones are not the stockholders of the Bell System.

The reason for this is to be found in a statement made last January by Congressman David J. Lewis, whose interview on this subject was published in the August issue of the *Metropolitan*. "Be it said for the Bell System," admitted Mr. Lewis, "that it is the one great corporation in our country that has not issued tons of counterfeit capital. Its stocks and bonds to-day represent the actual contributions of its shareholders in money to a great common enterprise." As a matter of fact, the actual value of the Bell System's property considerably exceeds the par value of its securities, so that the most stockholders could suffer would be the temporary inconvenience of reinvesting their funds, which would be returned to them not only intact, but enhanced, as a result of this singularly conservative and economical management of their property.

The interest that would be most vitally concerned in the proposed change is that of the American public itself.

Few of us realize how intimately the telephone, under private management in this country, has been woven into our everyday life. In our cities it has made possible the skyscraper's airy accommodations, the apartment-houses and hotels, which have raised people above the din and dust of our city streets. Outside the city it has made suburbs blossom out of waste places, annihilating distance, and bringing the businessman in an instant from home to business and business to home. It has penetrated into the rural districts, furnishing the American farmer facilities for communication hitherto undreamed of. Money is moved by telephone. Trains are moved by telephone. Buildings, bridges, tunnels, reservoirs and all sorts of public works are built by telephone. Carriages and cars are called, employees secured, emergency help summoned—the whole machinery of American civilization kept going by telephone. As one prominent Englishman, after a visit to this country, expressed it, writing in the *Liverpool Evening Express*: "Wiretalking in America is all done so quietly, so comfortably, so easily, so surely—either local or long distance—that one wonders how a civilized people like we are presumed to be can stand our ridiculous English telephone system. Truly we are a long-suffering people. Rarely does an American shout in his telephone. He speaks in a soft,

easy voice, for all the world like a man saying his prayers in church."

The most vital consideration as to Government ownership of telephones, therefore, is the effect it will have upon the public.

Now the public, in its attitude toward the telephone, is concerned primarily in its most efficient development and maintenance. This means the *usefulness* of the service, and its *price*.

The first point made by Mr. Lewis, in his interview, was that "The telephone is a luxury in America; only well-to-do people can afford it." Reading this, one would naturally expect the interview to disclose that the proportion of Americans with telephones is far below that of foreign countries. But nothing of this kind appears; instead, merely another assertion of a similar nature as to telegraphs.

Now this is an important point. The extent to which any service is used is, perhaps, the best indication as to whether the service is good and cheap. "The proof of the pudding is in the eating." What are the facts as to the development of the telephone service here and abroad?

There are in the United States to-day more than 9,000,000 telephones.

Europe has over four times the population of the United States.

It has less than half the number of telephones.

According to the United States Census statistics, recently published, this country has more than nine telephones for every hundred inhabitants.

Europe (official reports) has less than one telephone for every hundred inhabitants.

To be exact, the United States, under private ownership, has, in proportion to population, eleven times the number of telephones in Europe.

Great Britain (Government operation) has a little over 700,000 telephones in the whole country. This is about the number the United States gained in one year. Germany (Government operation) has less than two telephones per hundred inhabitants. Its telephone, from the standpoint of the number of people it can reach, is one-fifth as useful as the American telephone. Switzerland (Government operation) has a little more than two telephones per hundred inhabitants. In all France (Government operation) there are barely more than one-half the number of telephones in New York City alone.

The country is served by considerably less than one telephone per hundred inhabitants. Per inhabitant, the United States has thirteen times the number of telephones in France. Austria (Government operation) has about the same number of telephones as Boston. Per inhabitant, the United States has eighteen times the number of telephones in Austria.

It is not a *fact*, therefore, that "The telephone is a luxury in America; only well-to-do people can afford it."

As to the telegraph, Mr. Lewis' assertion is, "Measured by use, every country in Europe, even the poorest, sends more telegrams per person (with the exception of Russia) than does the United States."

In view of the impoverished foreign telephone development, this is exactly what one might expect to find. Indeed, if Europe had no telephone service at all, we should expect the number of telegraph messages per person to be still greater. But as a matter of fact, Mr. Lewis' statistics have unjustly punished the United States, because European telegraph statistics are heavily "padded," in the following manner: Most European countries are small in area, so that a very considerable amount of telegraph traffic is international. In the statistics Mr. Lewis has used, an international message is counted at least twice, once in the country where it originates and again in the country where it terminates; and if the message passes through two or three countries, it is counted in each country through which it passes. The true value of Mr. Lewis' telegraph traffic statistics may be judged from the fact that they are thus, in some cases, inflated by as much as 100 per cent.

Now it is clear that if we are to get a true comparison between telegraph traffic here and abroad, we must not only cut out this heavy padding, but take into consideration also the other types of traffic—telephone and mail. And if we do this—if we cut out inward international messages, "transit" international messages, and, further, "service" (uncommercial) messages, deducting at the same time ten per cent from American telegraph messages for possible duplications—here is what we get:

FIRST-CLASS MAIL, TELEGRAPH AND TELEPHONE
TRAFFIC PER INHABITANT, YEAR 1912

Country	Mail Pieces Per Inhabitant	Telegraph Messages Per In- habitant	Telephone Messages Per Inhabitant	Total
Austria	56.5	.50	12.55	69.55
Belgium	50.8	.82	18.23	69.85
Denmark	58.7	.62	81.24*	140.56
France	43.5 (1912)	1.15	8.36	53.01
Germany	81.8	.75	34.89	117.44
Great Britain	91.0	1.77	23.81	116.58
Hungary	28.5	.48	9.59	38.57
Italy	21.6	.63	9.93*	32.16
Luxembourg	82.6	.57	18.45	101.62
Netherlands...	49.3	.76	27.92*	77.98
Norway	39.6	1.23	70.01*	110.83
Sweden	35.6	.49	77.47*	113.56
Switzerland....	98.1	.83	17.85	116.78
United States	106.0	1.05	161.99	269.04

* Partly private

The *fact* is, therefore, that, contrary to Mr. Lewis' contention, Americans use telephones far more under private ownership than under government ownership, and use telegraphs more, except as to those government-ownership countries where an impoverished telephone development forces an abnormal use of the telegraph.

The next point taken up in the interview is the matter of rates. In exactly nine lines of print we find a complete comparison of telegraph rates made with nine foreign countries—and not a word of qualification. Now, anyone who has examined foreign telegraph rate schedules knows that unless a number of very important considerations are taken into account, such comparisons are as worthless as comparisons of butter and buttercups. For example, the address and signature on telegrams are charged for abroad, in addition to the regular rate quoted; they are free in this country. The average number of such words per telegram is ten. Again, there are two kinds of telegrams abroad—"urgent," which correspond to our regular telegraph messages, and "ordinary," a deferred service which must wait upon the "urgent." Rates for "urgent" telegrams are three times the "ordinary" rates. Mr. Lewis quotes only "ordinary" rates in comparing them with American telegraph rates. There are numerous other differences, by omitting which Mr. Lewis has penalized American telegraph rates; but if we make an allowance for the difference as to address and signature alone, we find that, for comparable distances, foreign "ordinary" rates in many cases approximate the American rates, and foreign "urgent" rates are in most cases much higher, and in several instances, as, for example, Germany, Italy, Denmark and Austria, from two to three times as high.

But when we come to that part of the interview dealing with telephone rates, we find comparisons still more startling. To illustrate the kind of comparisons which were made we might take the following example:

Cost of automobiles in Paris	\$7,500.00
Cost of automobiles in New York City	800.00
Cost of telephones in Paris	77.20
Cost of telephones in New York City	228.00

Not to mention, in the first comparison, that the Mercedes car was taken for Paris, and the Ford for New York, is just as serious an omission as not to mention that the Paris telephone exchange is one-fifth as large, and hence far less expensive to operate, than the New York exchange; that in Paris you buy your own telephone instrument; that only from one-fourth to one-half of one per cent of New York telephone subscribers pay the rate quoted, \$228, although the rate quoted for Paris is the only rate available in Paris, etc.

Of course, to get anywhere in such comparisons, you must take into account not only the size of the exchange, but the number of subscribers *using* the service at the rate quoted and, above all, the *average rate paid*. For instance, Budapest has the same size exchange as St. Paul, Minnesota. Ninety-four per cent of the St. Paul subscribers pay less than the lowest possible rate in Budapest. Similar results may be shown for such comparative exchanges as The Hague and San Antonio,

Texas; Tokyo and Omaha, Nebraska; Amsterdam, Holland, and Rochester, New York; Rotterdam and St. Joseph, Missouri, etc. Even taking Paris, whose exchange is only one-fifth the size of the New York exchange, we find that 79 per cent of the subscribers in New York City pay less than the Paris rate. Ninety per cent of the Philadelphia subscribers and 91 per cent of the Chicago subscribers pay less than the Paris rate.

Not only is the average charge for telephone service abroad greater than in this country, when the same units of measurement are used, but when you get down to the smaller places foreign rates are so much higher that they are virtually prohibitive, especially in the rural districts. This goes a long way to explain why the British Postmaster-General recently prided himself on a total of 2,300 farmers' telephones in the entire country.

But, after all, what good are rate comparisons, if you don't consider what you get for your money? Not to speak of the *quality* of foreign service—which, as every one who has traveled abroad knows is far inferior to the American—take the simple matter of the *quantity* of service; the hours during which the telephone service is open to the public. In Switzerland, for example, 96 per cent of the telephone exchanges close at 9 o'clock p. m. Forty-six per cent operate from 7 a. m. to noon, then close two hours for lunch, open again until 6 p. m., close two hours for tea, then open at 8 p. m., stay open till 8.30 p. m., and put up the shutters for the night. This is a sample of the kind of service you will get throughout the length and breadth of Europe, and yet rate comparisons are made in all seriousness, and absolute conclusions drawn therefrom and presented without a single qualification to the American public.

And the toll (long distance) rate comparisons made by Mr. Lewis? It will be remembered, a table of "long distance rates" was published in the interview. On the face of this table American toll rates were made to appear, by comparison, shockingly exorbitant. But—behind the table there lurked a number of Africans, carefully concealed from public view.

Here is one of them.

Abroad they have two kinds of long distance service, "preferred" and "deferred," the latter costing about one-third the former. *Mr. Lewis carefully selected the "deferred" rates and then contrasted them with ours.*

This "deferred" service in foreign countries is interesting. Say you live in Germany. You want to talk to an out-of-town businessman. You get an "assignment." They tell you you can have the connection at ten o'clock—perhaps the same day, perhaps the next day, if the appointments are all taken up. The connection is put up for you at ten. If you are not there you are charged. If you are there, you must finish your conversation within a stipulated period. If you do not finish in the given period you are cut off and you cannot talk again until your turn comes around again—which may not be until the next day.

Now the *fact* is that, for the shorter distances, within which four-fifths of the traffic falls, American toll rates—

even on a nominal basis, and not considering that a dollar here often corresponds to a half or quarter of a dollar abroad—are *lower* than in foreign countries for regular messages; and if we take foreign international messages, which Mr. Lewis completely ignored, we find they are from three to four times as high as our rates for corresponding distances.

As for the longer distances, the foreign service is rarely commercial. Official complaints in the German Reichstag amply testify to this. Or, take Chambéry, in France, as an example. The Chamber of Commerce complains that it cannot get connection with Paris (280 miles) until *the day after the call is filed*. Imagine living in Paris and being detained in Chambéry; you call up your home to-day, you get it to-morrow, and tell your wife you won't be home last night. Rate comparisons, in such cases, are nothing less than absurd.

In short, none of Mr. Lewis' assertions as to rates are warranted by the facts. It is not a *fact* that telegraph, "local" telephone or long distance telephone rates are lower abroad than in the United States.

Do government-owned telephone and telegraph systems pay? The interview with Mr. Lewis leaves the impression they do. The writer has before him a recently issued statement of the British Post-Office Department, admitting it has lost a hundred and ten million dollars on its telegraph since the government took it over. Similarly, a study of all available reports and official information on the combined operations of government-owned and operated telephones and telegraphs shows that they are, without exception, operated at a deficit. It is not a *fact* that government telephone and telegraph systems abroad are productive of profit.

The interview goes on to cite a score or more American cities in which telephone rates are shown to be strangely at variance with one another; and the next paragraph proceeds to attribute the differences to the effects of competition. Here is what actually happened: Mr. Lewis simply selected the highest-priced business-service charges for his "no competition" rates, and the lowest-priced residence charges for his "competition" rates, and then "compared" them. Incidentally, Mr. Lewis procured these "statistics" from a Bell competitor and presented them to the public in toto as gospel.

Most striking of all, however, were the efficiency comparisons which were made between government and private operation. To many of us, acquainted with friends "working for the government," it doubtless came as a distinct surprise to learn what marvelous strides in efficiency our government-employed friends were really making. A close scrutiny of the statistics which were used, however, will prove illuminating.

If one will look into the voluminous report prepared by the clerks of the Post-Office Department, upon which Mr. Lewis based his statistics, one will find that the figures for foreign telephone, telegraph and post-office systems bristle with footnotes. These footnotes say, in effect, that you cannot determine anything as to the results of operation or the number of employees in each

service, because the post-office and telephone and telegraph are operated jointly, and their results are not shown separately. For instance, in Norway most of the telephone employees perform, also, telegraph duties. Only a small part of the whole are engaged solely in telephone work. How to figure your efficiency? *Mr. Lewis took this small number of employees engaged solely in telephone work, ignored the rest, and divided this number into the total number of telephone messages for Norway.* The result was published as Norway's telephone "efficiency." Similar results, by similar methods, were obtained for the other countries.

If we *must* demonstrate statistically that private employees are more efficient than holders of government jobs, a significant comparison would be the plant cost per telephone, under public and under private ownership, for the more money you spend in doing a given amount of work, the less your efficiency. The plant of the Bell System, including long distance lines, stands at \$153 per station. The corresponding official figures for foreign countries are as follows: Australia, \$10 higher; Germany, \$25 higher; Switzerland, \$39 higher; Hungary, \$40 higher; Austria, \$60 higher; France, \$100 higher, and Belgium, \$125 higher.

It is difficult to understand how Mr. Lewis could have attempted a measurement of Post-Office efficiency on the basis of the "average mail piece per employee," when we recall that the Joint Congressional Commission on Business Method in the Post-Office, one of whose members was the Hon. John A. Moon, Chairman of the House Committee on Post-Offices and Post Roads, was forced, after thorough investigation by the most expert accountants in the country, to admit that the Department's inefficiency was so appalling, that "Under such a system a large railroad, commercial or industrial business would inevitably go into bankruptcy, and the Post-Office Department has averted that fate only because the United States Treasury has been available to meet deficiencies." And when it came to striking an *efficiency average*, the experts employed by the Commission threw up their hands. "We have seen in different efficiency statements of work done that exactly the same class of work done by individuals has varied in exceptional cases from under 2,000 to over 22,000 operations in the same period of time."

What is the method whereby Mr. Lewis proposes to acquire the telephone and telegraph systems? He would have the government take over the telephone, but not the telegraph; then compete on telephone lines with the existing telegraph lines, until the latter have been clubbed into insensibility, when they will either drop out of existence, or be taken over bodily by the government at junk value. Does anyone believe this type of warfare

will be assumed by a great government, or countenanced for a moment by the American people?

Mr. Lewis is to purchase the telephone by issuing nearly a billion dollars of 50-year bonds—at 3 per cent. Among the world's nations the United States is remarkable for borrowing so little and spending so much out of its current income. Its credit on that account is high. Yet its Panama Canal 3s have been selling below par. Notwithstanding, the United States, according to Mr. Lewis, is to double its National Debt—and still maintain 3 per cent credit.

But even assuming that this were possible, no student of public affairs believes that the difference between the public and private interest rate would equal the financial loss which would be entailed, by subjecting so vast a system as the telephone to the régime of political partisanship and Pork Barrel methods with which we are all so familiar, whereby appropriations are no longer to be made the result of careful and scientific management, but subject to all the evils of log-rolling and political bickering—the football of ambitious or unscrupulous politicians.

The telephone rates to-day represent actual cost, as supervised by our public regulating bodies, upon a basis of the most efficient management of the property used and useful in the service. The net interest and dividend return of the Bell System during the last year represents 4.92 per cent of the actual property value—as sworn to in the Official Report. If the government acquired the service and lowered the rates, the inevitable result would be a deficit—worse by far than the present Post-Office deficit; and while the latter may be justified because the mails are universal in use, who can justify a system whereby nine-tenths of the population is to be taxed to help pay the telephone bills of the other tenth?

To urge government ownership of telephones in this country one must be prepared to say that government control has proved a failure. Is Mr. Lewis prepared to take this stand, with regulation practically a new thing? Is he prepared to say that all the efforts now being directed by the public in improving and strengthening our machinery of regulation are purely so much wasted effort; that Congress itself is wasting the public funds upon a fruitless task, in its work recently begun, through the Interstate Commerce Commission, of undertaking the valuation of all telephone and telegraph companies in this country? Would it not be wiser to heed the advice of President Wilson and remember that "such are the difficulties in the way of establishing and maintaining careful business management on the part of the government that control ought to be preferred to direct administration in as many cases as possible—in every case in which control without administration can be made effectual"?

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*American Telephone and Telegraph Co.
"Brief of Arguments against Public Ownership"
Suppl. 2*

LEWIS-SYLVAN DEBATE

ON

GOVERNMENT OWNERSHIP OF TELEPHONES AND TELEGRAPHS

Giving Speech of Mr. T. P. Sylvan, Assistant to Vice-President,
New York Telephone Company, in Debate with the Hon.
David J. Lewis, Representative from Maryland,
before the Providence Economic Club, Providence,
Rhode Island, April 22, 1914.

SUPPLEMENT No. 21
FOR
BRIEF OF ARGUMENTS
AGAINST
PUBLIC OWNERSHIP



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14/9/15

American Telephone and Telegraph Company
Commercial Engineer's Office
New York

From
London

Following is the address of Mr. T. P. Sylvan, Assistant to Vice-President, New York Telephone Company, in a debate with Congressman David J. Lewis, of Maryland, held before the Providence Economic Club, Providence, Rhode Island, April 22, 1914. Owing to the limitation of time, a number of quotations given here in full were merely referred to in the abstract in the actual delivery of the address:

Mr. President and Members of the Economic Club:

I trust you will bear with me because I have got somewhat of a cold, but I shall try to make myself heard. It is indeed a pleasure to come to a gathering of this kind and see so many people interested in this subject, because, from my way of looking at it, all that we need is a careful consideration of this question. Like Mr. Lewis, we too, are content to appeal to the good sense of the people. We have got to approach this thing in a calm and deliberate manner. There is no necessity of becoming excited. The country is not particularly suffering in the meantime.

No Stockholders' Brief

I do not come here tonight with a brief for the stockholders of the Bell System. Our organization, as Mr. Lewis himself has stated, in his address before the Republican Club in New York City last January, is one of the few in the country whose securities are free from water or inflation.

His words were:

"Be it said for the Bell System that it is the one great corporation in our country that has not issued tons of counterfeit capital. Its stocks and bonds to-day represent the actual contributions of its shareholders in money to a great common enterprise, and we will not have that unfortunate circumstance to deal with in the valuation of their properties."

The capitalization of the Bell System is based upon honest investment, and the actual value of the property is considerably in excess of the par value of the securities; so that if, after a calm and painstaking investigation, the Government should decide to take over the property of the Bell System, it would have no trouble from that score, nor would the stockholders suffer any loss save the temporary inconvenience of reinvesting their funds, which would be returned to them intact.

Legal Objections Not Considered

Nor do I approach this subject from the legal standpoint. To be sure, the legal problem involved is by no means unclouded, and presents a number of very grave questions whose determination is far from simple. Are the State of Rhode Island and the City of Providence, for instance, ready to give up their control and supervision over so important a part of their affairs as the telephone, and allow the Federal Government to step in and silence their authority forever, eliminating, at the same time, the important source of revenue from taxation, which is now being derived from the telephone property? However, I do not propose to take up this and other similarly important questions, because, I am sure, a consideration of the purely economic aspects of the subject will decide this case in favor of the present system of regulated private ownership, and make unnecessary the consideration of the legal or other objections.

Efficient Service the Main Question

I approach this subject from a far broader point of view; from the standpoint of service—efficiency of service. That is the basis upon which this whole matter of government ownership must be settled. And when I say “efficiency,” I mean, of course, the quality of the service and the price of the service, for, after all, these are the questions in which the public concerns itself in its attitude toward the telephone.

Now in this question of efficiency of service, the interests of the public, of course, very properly take first place; and we, the employees,—for I number myself one of an army of 150,000 who are serving the public in this matter—must necessarily take the second place. From my way of looking at this telephone proposition, it is not a question of ownership so much as it is a question of the organization itself—a great big machine that is serving you to-day; and that machine consists of this army of employees, and anything which will make that machine more efficient and which will permit it to work more efficiently and more economically than it does to-day, is to be commended, but anything which will make that machine run more slowly or with more difficulty, must be discarded. To show how important a factor is the personnel of the organization, as distinguished from the owner—the stock and bond holder—I might mention that the Bell System to-day pays out, in the form of salaries and wages, 50% of the money it receives from the public, and the amount paid out in the form of interest and dividends represented, during the last year, but 4.92%—less than 5%—upon the actual plant in service. Now, I say, gentlemen, a lot of credit is due to great men like Mr. Vail—and Mr. Lewis is willing to and does give him a measure of that credit—when you stop to think that, in reducing this interest charge to 4.92%, he has done so by taking advantage of the credit of our Company. More than \$26,000,000 has been turned into the treasury of the American Telephone and Telegraph Company by the use of convertible bonds at times when our credit warranted getting prices in excess of par. It is by this

means that we have been enabled to cut down the interest charges on investment to the low figure of 4.92% on the value of the plant in service. While it is true that 8% is paid on some of our securities, less is paid on bonds and other securities, and nothing at all on the \$26,000,000 just mentioned.

Public Service Motive Qualified

Mr. Lewis lays great stress upon the "public service motive" as distinguished from the "private service motive," and attempts to show how the "public service motive" has dominated the administration of the Post Office Department. Now I say that the "public service motive," in its narrower sense, which absolutely ignores questions of cost or distribution of cost burden, is inherently wrong, and I am glad that our present Postmaster General, unlike Mr. Lewis, has had the discernment to temper and qualify the "public service motive" as he did in his last annual report, when he brought out the fact that the experiment of free mail delivery in villages had been abandoned, because he found that more just and equitable results could be obtained by having the people call for their own mail, rather than having the underpaid carriers bring it to them. On page 34 of his last annual report, the Postmaster General says:

"The results attained during the year are believed not to warrant the continuance or extension of village delivery. There is no such need or demand for free delivery of mail in small towns and villages as there is in cities and rural districts, and its establishment does not occasion any appreciable increase in the use of the mails. An economical administration of such a service would require the limiting of delivery in nearly every instance to one a day and the employment of carriers at salaries lower than those paid to city and rural carriers. Such service is regarded as inferior by the patrons, who in such communities live near the post office and are in the habit of calling two or three times a day for their mail. The low salaries of the carriers, moreover, would not conduce to efficient service."

Public Insured Proper Treatment by Regulation

On the other hand, the so-called commercial motive, in its narrowest sense—in the sense that it looks merely to the immediate profit and disregards those considerations of public service which make for permanency and secure the establishment of good will—is equally wrong. We, and all other progressive concerns, have long since learned that our most valuable asset is not an immediate and excessive profit, dictated by any narrow or selfish policy to which Mr. Lewis refers in his exposition of the "private service motive," but a continuous fair profit, and a contented public. A significant factor, however, which Mr. Lewis, in all his remarks, seems to have ignored, is that the public itself has recognized this principle, and, instead of leaving it to the good sense of the corporation to enforce it, has enforced the principle itself; has instituted a system of proper public regulation of utilities, to the end that there may be a blending of the "public service motive" with the "private service motive," whereby the best results can be and have been most happily obtained. The public has taken up, if you

please, that principle which Mr. Adams pronounced way back in 1887, and which Mr. Lewis appears to have only just discovered, and has said that these large institutions that serve the public must not be left unregulated. The public has not taken it up as a measure of ill-will toward the companies, nor as any evidence of a crying necessity, but with the idea of equal protection to public and public utility alike. It said, in substance, "We are going to protect the utilities in the exercise of their functions, so long as they properly serve the public." In practically every State of the Union to-day, we have these regulative bodies as a part of the fundamental law. As an instance of protection to the utility, you have got to prove "public necessity" to the Commission, before you can enter a field already served, in the proper meaning of the word. As an instance of protection to the public, you have the Interstate Commerce Commission, with its tremendous power, illustrated to-day in its control of the railroad situation, with the railroads appealing for an increase in rates—not a cent of which can be granted without the approval of the Commission.

Now, I say that the public has taken this matter in hand, and decided that these public regulative bodies shall first be considered and consulted, before the utility can take any step affecting the rights of the public. They can be made use of by every citizen. There is absolutely no red tape. You do not have to employ an attorney. You write a letter and get a hearing. And that is all there is to it. The Commission sits as a public tribunal and metes out justice in exact proportion as is merited by the complaint.

So that, in all this talk about "public service motive" and "private service motive," we must remember that the public has recognized, and has enacted into its fundamental laws, the principle that a "public service motive" which runs counter to good business sense, which ignores questions of price and cost, (without which you cannot determine how efficiently and economically your property is operated), is just as wrong as the "private service motive," which recognizes immediate profit, and that alone.

Furthermore, we have something to-day that I am glad we have, and that is potential competition, and it is something that the people want, and must retain, because I can conceive how there may come a time when a utility, governmental or private, by reason of a change in personnel, may lose public support and confidence. In such a case, under our present laws as they stand to-day, the public has recourse to the ever present competition which may be changed to actual competition when the community feels that matters have come to such a pass as to make such a change desirable, and this potential competition is one of the strongest weapons which the public has to defend itself against any such emergencies as may arise in the course of time.

Regulation Should Be Given Fair Trial

Now, the only way Mr. Lewis or any one else can ignore this question, is by saying, fundamentally, that regulation has proven a failure. And how can any man in this country, with regulation prac-

tically a new thing, take that stand? To adopt this stand, one must entirely ignore the present tendency of our administration; must say that all the efforts now being directed by the public in improving and strengthening our machinery of public regulation are purely so much wasted effort; that Congress, itself, is wasting the public funds upon a fruitless task in its work, begun a short time ago, through the Interstate Commerce Commission, of undertaking the valuation of all telephone and telegraph companies in this country,—a task which the Commission is now engaged upon, and for which a great deal of time must necessarily be expended. To take such a stand, one must be ready to condemn the whole scheme of public regulation at its very inception; declare that, although in its formative stage, it has failed in its mission. That is something I cannot understand. Mr. Lewis knows that in his own home State, the Public Service Commission is to-day engaged in a state-wide rate investigation, to determine upon the propriety of the scheme of state-wide telephone rates, and that the same is being done in the State of Pennsylvania, and elsewhere, and that an honest effort is being made, with the cooperation of the Telephone Company and the Public Service Commission, to determine upon a fair valuation, and to reach an adjudication of what is a proper and reasonable rate for reasonable service. On the part of the Company there is nothing but an honest effort to submit to a question of justice, nothing but the laying of the cards on the table so that the public may see and judge, and, on the part of the Commission there is nothing but a painstaking and scientific effort to base action upon knowledge, and knowledge alone. Will Mr. Lewis say that all this is idle and fruitless?

Complete Unregulated Monopoly Proposed by Mr. Lewis

But if we change all this—change our fundamental and painstakingly worked out plan, which the public, in its wisdom has set up—where do we land? We not only lose this scheme of control and regulation—but see what we substitute. Not long ago, the Attorney General, with a great deal of pride, pried apart the telephone and the telegraph on the sole assumption that those two were competitive services, and should not be under one head. This cost the American Telephone and Telegraph Company a good deal, but, as decent citizens, we obeyed the order without protest. We separated. And the President of the United States came out in a hearty public commendation of this action. Now comes our friend Mr. Lewis and seeks, not only to re-unite the telephone and the telegraph into one agency, but to amalgamate the two with the postal service, so that the three agencies, which, according to the views of the administration, are to-day in a measure competing—and I might say competing in the sense that to-day you have the choice open to you to send your communication by first-class mail, telegram or telephone, as you please—these three conveniences are to be lumped together into one service, and what was wrong on the part of private companies, is to become right on the part of the Government. You are to have absolutely no chance for protest or appeal to commissions or

courts. If you are dissatisfied with the mail and want to use the telegram, you go to the Government; if you are dissatisfied with the telegram, and want to use the telephone, you go to the Government; and if a condition of public service arises where, from a series of accumulated abuses, the public is seeking relief, nothing short of a political revolution will secure the necessary attention.

Deliver Us From Politics

Gentlemen, I have worked for many years in telephoning, and I have never yet had my "boss" ask me what my party was or which way I intended to vote. I tell you it is a serious matter if we are to add to the many questions before the public to-day, such as the monopoly question, the tariff question, the money question, and many others, on top of them the question of local telephone service—of your telephone service, for instance, here in Providence. So that you find yourself in a situation, say, where, if the man whom you have sent to Washington to represent you because he stands for all you hold dear on questions of tariff, does not happen to suit on the post office and telephone proposition, you have just got to take the telephone and let the tariff go, or take the tariff and let the telephone go. To say the least, this is an exigency which may arise if the Government of the United States claims a monopoly on all means of communication.

Present Conditions Right

Now I say that, in the face of present conditions, Mr. Lewis and everybody else must acknowledge that rates in this country and conditions of telephone service are right. If they are not right, he has access to the Interstate Commerce Commission, and practically every State commission in the country, to see that they are made right. This is not merely his privilege, it is his duty as a citizen and it is anybody's duty that has any complaint against telephone rates or telephone service, to go before the Commission to secure a proper determination of the matter. So I say I do not care what comparison Mr. Lewis makes as to foreign rates, the rates here should be assumed to be right until otherwise determined. They have been filed with the Commission by the Company, and the Company stands ready to-day to meet any criticism manfully and fairly and to make or accept any change or provision that is proven just and reasonable. Now, gentlemen, remember that in your public service regulation you have been clean, fair and decent. You have insisted that whatever action is taken shall be taken only upon thorough investigation, to the end that no action shall be taken except as it is preceded by exact knowledge. You have said that our earnings shall not be based on water, on error, mistake, on inefficient management or excessive cost, but that they shall be based upon the fair value of the property *used* and *useful* in the service. Can any one claim a basis fairer than that for rate making?

Public Approve Service

Not only are telephone rates and conditions of service as they should be, sanctioned by the public, through its regularly constituted public service tribunals, but the public has shown, by the best test possible—the use of the service—the extent to which the telephone service has met with its approval. I mean by this that when it comes to development, the United States is so far in the lead over countries where government ownership obtains, that comparisons of telephone development are almost laughable. You will remember very clearly that Mr. Lewis made the statement just before he sat down that it was our great and noble general, Theodore N. Vail, who laid down the slogan for his army to follow, that he would not rest content with the development of our telephone service until there was a telephone in every man's house. That was the slogan of our system long ago; that is the goal we have been trying to reach for years. That is to-day our aim, and I propose to show you that we have come nearer to this goal than any other country on the face of the earth.

United States Telephone Center of World

There are, to-day, in this country, upwards of 9,000,000 telephones. The United States, with less than 6% of the world's population, has more than 65% of the world's telephone development. Europe, with four times the population of the United States, has less than one-half the number of telephones. Not so bad, Mr. Lewis, for private enterprise.

The United States, according to the census just published, has nine telephones per hundred inhabitants, and has gained, during the last year, nearly as many stations as Great Britain has to-day in its entire system. Great Britain, by the way, has 1½ telephones per hundred inhabitants, or one-sixth of our telephone development. Germany has two telephones per hundred inhabitants; Netherlands two telephones per hundred inhabitants; Switzerland two telephones per hundred; Belgium four-fifths of a telephone per hundred; France four-sixths of a telephone per hundred. The entire country of France has about the same number of telephones as we have in New York City alone. Not so bad, Mr. Lewis, for private enterprise.

United States Service Diversified

And, mind you, this development has not been obtained by skimming the cream off the milk, as has been done by governments in the foreign countries, under the "public service motive." Let me show you how we, actuated, as Mr. Lewis would say, by the modern "private service motive," have taken care of the outlying and rural districts, as well as our big cities. There is a gentleman with me here to-night who formerly worked in Indianapolis, and who, years ago, tramped through Indiana, and his sole mission was to open up outlying sections and to establish rural telephone business long before the Post Office Department thought these sections worthy of rural mail routes. And, mark

this, Mr. Lewis, in the United States, with our so-called "private service motive," 19½% of our exchanges have from 50 to 100 stations; 25.8% have from 100 to 200 stations, and 13.1% have from 200 to 300 stations. In other words, about 60% of our telephone development is to be found in exchanges of 300 stations or less. Compare this, if you will, with the urban and rural development of foreign governmental telephone systems, where the average rural development represents but 21.2% of the corresponding urban development. How about this, Mr. Lewis, as an example of your "public service motive?" Why, in our State of Iowa, which is highly rural, the density of development is greater than in any other part of the United States. How about this, Mr. Lewis, as an example of your "private service motive?"

Universal Service Slogan

Now we have been accused—not by Mr. Lewis, I am glad to say, but by some of his friends—that we have been remiss in connecting with other companies. I want to say that for fifteen years I have been out making connecting contracts with other companies, and now, as a part of our scheme of universal service, which some thoughtless people have mistaken for monopoly—which we have never desired—I say we connect with nearly 3,000,000 stations operated independently and not controlled by the Bell Company. We have been striving, as I say, for universal service, not universal ownership. The song Mr. Vail has sung from the start has been "universal service;" in other words, one system, the idea being that every telephone in the United States may be the center of a system, and that isolation shall be wiped out as rapidly as is humanly possible. Through the aid of our friend, the Attorney General, this movement, in the direction of one complete system of universal service, has received a new impetus by the new arrangement agreed upon for connection with the so-called competitive exchanges. We shall soon, therefore, realize the grand spectacle of one system with universal service to more than nine millions of telephones. Not so bad for private enterprise.

Relative Use of Telephone a Good Test

Now with nine million telephones in service in this country, Mr. Lewis will have to admit that we have a pretty fair basis of comparison with foreign countries, and I am afraid Mr. Lewis would find it rather hard to fit this condition into his theories of "public service motive" and "private service motive." But this is not all: you can talk as much as you please about figures and foreign lands, but there is one comparison which, to me, seems very significant:—when considering first-class mail matter, telephones, and telegraphs as alternative means of communication in Europe, what do we find? We find that in Europe 71.2% of all such communication travels by mail. The corresponding figure in the United States where competitive conditions prevail, is 39.4% by first-class mail. And when we come to the telephone, we find that of the total communications in Europe, 27.3% go by telephone. In the United States the percentage of total communications that go by

telephone is 60.2%. Not so bad, Mr. Lewis, for the poor despised "private service motive" telephone. After all, Mr. Lewis, it is service that counts; not theories. The proof of the pudding is in the eating—is it not, Mr. Lewis?

There is one more point about Mr. Lewis' theory of "public service motive" and "private service motive" that I should like to touch upon, if I had time, and that is Mr. Lewis' example of the Chicago and Milwaukee rate case. I am rather surprised that Mr. Lewis should have mentioned this case again, in view of the fact that he must have seen how utterly unfair this example was, if he read the last annual report of President Vail. Here is the true story, as it appeared in President Vail's last annual report, of The Chicago & Milwaukee Telegraph Line, which Mr. Lewis picked out as an example of the viciousness of the "private service motive":

"The Chicago & Milwaukee telegraph has been set up as an example of the evils of private operation. Why this single line of some fifty miles in length should have been selected is difficult to understand. Any line situated under such favorable conditions, doing business only between two large cities, should and could be operated at rates which could not apply to lines or systems which take business from and to all points, *while the peculiar conditions* under which this particular line operated put it absolutely outside of comparison whether with other lines or with any system. The history of this company is well known, and if not known to those who have used it as an illustration, it could have been obtained with little effort.

"Built in 1878 by some linemen as a speculation, it was sold to some members of the boards of trade of Chicago and Milwaukee and incorporated with a stock of \$50,000. *The business of this line was confined almost exclusively to messages from floor to floor of the two boards*, to news service and to leasing private lines. While it accepted other service, *it had no organization to, and did not deliver or collect messages except by telephone*. The company apparently made large profits, but it must have been at the expense of maintenance and depreciation, for later on the company was reorganized with a capital stock of \$50,000 and \$50,000 of bonds, and the lines reconstructed. This new company operated until 1905, *when it went into receivership* and the lines were operated by the receiver until 1907, when it was offered for sale, and the Chicago and the Wisconsin Telephone Companies needing additional lines, purchased it in connection with the American Telephone and Telegraph Company, for toll and long-distance business. This was five years before an interest in the Western Union was acquired or contemplated.

"The lines are now used for telephone business principally. The commercial experience and history of this line are not such as make it a good argument for lower telegraph rates, either under private or government operation, and even under such favorable auspices its experience was certainly not such as would encourage private enterprise in another attempt, although the field is open to all."

Not Yet Through Growing

Now we have been accused of having reached the zenith of our development; that under private ownership we won't go any further. I want to say to Mr. Lewis that we are only beginning to unfold the possibilities of our development. Last year we expended on the Bell System \$55,000,000 for additions to plant; this year our budget calls for \$60,000,000. And we are going to keep right on developing, going forward, if only the public will let us by continuing their encouragement.

Lewis Figures Analyzed

And now as to the comparisons of efficiency and rates which Mr. Lewis has made. You yourselves know how easy it is to prove anything by stretching statistics this way or that. Figures are rather dry at best, but I want to say for your information that we have compiled a study of the comparisons which Mr. Lewis has made as to efficiency and rates between the United States and foreign countries. If you care to, you can obtain copies of this at the close of this discussion. You will see, I think, how misleading and unwarranted are the statistics which Mr. Lewis has presented, and upon which he has attempted to make his case for Government Ownership; you will see how artificial and unreliable is the fabric of statistics which has been constructed, and you will find that our exposition of this fact is not merely controversial, but is based upon official information of the highest sort, and this information is not only cited in each case in this study, but we are ready to have anyone who desires, including Mr. Lewis, verify the information by recourse to our files.

Peculiar Methods

The funny thing about these statistics is, that the method Mr. Lewis adopted in figuring efficiency, was to take the total number of messages and divide that by the total number of employees engaged in each service, and then to call the result the showing of efficiency on the part of the service. You can see for yourself how impossible such a method is, in order to get a true showing for efficiency. For one thing, we, in this country, unlike the government systems of foreign countries, as you will see later, are constantly modernizing our plant, and looking ahead into the future, and by this fact alone we have been penalized by Mr. Lewis' efficiency methods, because we have a lot of engineers and a lot of men constantly engaged in this advance construction. Mr. Lewis had no difficulty in picking out the number of our people working, and he said, "We will count you all." I suppose if we had dropped this large force of men who are engaged in advance construction, who are engaged in work which will not show up, perhaps, for years to come, we could have shown, according to Mr. Lewis, a much higher "efficiency," because the fewer people you have on the job, the higher the efficiency. If we could cut down all our employees, during the coming year, for instance, who are not engaged directly in telephone operating, we would then, according to Mr. Lewis, show a marvelous efficiency.

But when Mr. Lewis came to foreign countries, he found a peculiar situation. If you will look at the report which was prepared by the Post Office Department recently, and submitted by Mr. Burleson to Congress, you will find that the figures for foreign telephone and telegraph and post office systems are presented with barrels of salt, by way of foot notes, and these foot notes practically say, in effect, that you cannot determine anything as to the results of operation or the number of employees in the service, because the post office and the telegraph and the telephone are operated jointly, and their results cannot

be shown separately. For instance, in Norway, most of the telephone employees also perform mail and telegraph duties, and a very small portion of the whole are engaged solely in telephone work. Now to give you an idea of how simple Mr. Lewis found the job of measuring efficiency under such circumstances—he simply took the total number of telephone messages for Norway, and then divided that by the number of employees who did telephone work exclusively—and the result purported to show what Government Ownership does for the people.

Our Economy Shown by Construction Cost

Well, gentlemen, despite the fact that we have been keeping up our plant all the time, that we have been engaged in advance construction, far into the future, that we have changed from the grounded to the aerial circuits, and from the aerial to the underground as fast as we could, and that we have not, as they did in European countries, forced the aid of municipalities to help in the matter; despite the fact that we have kept in advance of the march of progress, that great changes have been made in cable construction, cables being laid underground all the way from Boston to Washington; despite the fact that we could not, like foreign countries, confiscate property and rights of way, but had to pay good hard dollars for them, let us see how our real efficiency shows up in the way of costs in this country, including all the long distance, underground and spare plant—because we have a good bit of spare plant. You would not have to do, for instance, as they do in Tokio, Japan, where there are 20,000 poor Japs seeking telephone service, who have to get in line and wait their turn in order to get the privilege of subscribing to the government service, and who, so valuable has become the right to the first positions in the line, are trading these rights to subscribe for telephone service on the stock exchange and, in some cases, bequeathing them as valuable assets in their wills. For you see, Japan has no money at present for telephones; she needs battleships—battleships come first in Japan. But as I say, despite all this preparedness of the telephone in this country, and the fact that we have attended to telephone needs, present and future, to a far greater extent than has been possible under the foreign governmental systems, the plant of the Bell System, the American Telephone and Telegraph Company and its subsidiaries, including long distance lines, stands us to-day at \$153 per station. Australia stands at \$163 per station—\$10 higher; Germany, \$178—\$25 higher; Switzerland, \$192—\$40 higher; Hungary, \$193—\$40 higher; Austria, \$213—\$60 higher; France, \$253—\$100 higher, and Belgium, \$278—\$125 higher. Not so bad, Mr. Lewis, for the efficiency of private enterprise.

Some Exchange Rate Comparisons

Now, Mr. Lewis has had quite a bit to say about telephone rates. The question of rates is one of the most involved and technical in connection with the telephone business. I have already shown you how the public has dealt with the telephone in regard to rates, through public service regulation, and the stand we have taken on the subject. We

are willing, at any and all times, to change our rates to conform to any basis demonstrated by investigation to be more reasonable than the present. We are just as interested in a proper solution of this question as any one, and I submit that I have made it clear that, so far as investigation has shown, rates in this country are as they should be. But now what sort of rate comparisons have been made with foreign countries? Well, some of the rate statistics used by Mr. Lewis came from a source pretty badly tainted. I think he knows what I mean. And a favorite method of making comparisons is to take a big city, say like New York, and take your maximum business measured rate, and then stick that up on your flag and wave it around as the New York rate, and compare that rate with the smallest possible rate in other cities, and then talk about extortionate and unfair rates. Now what is the use of comparing rates this way? It is not fair; it is not honest, because the idea is not, What is the rate for one particular kind of service? but, What do the people of that city *pay* for telephone service? You have got to take into account not only the size of the exchanges, but the number of subscribers *using* the service, and above all the *average rate paid*. And if you do that, you find some such comparisons as these:

The minimum rate in The Hague is \$24. In San Antonio, Texas, an exchange of about the same size, it is \$18. 78% of the San Antonio subscribers pay not more than the minimum rate in The Hague, and most of them pay less.

The Omaha, Nebraska, exchange has about the same number of subscribers as Tokio (you will remember Tokio). 79% of the subscribers pay less than the minimum rate in Tokio.

Amsterdam, Holland, has about the same number of subscribers as Rochester, New York. 77% of the Rochester subscribers pay less than the minimum rate in Amsterdam.

Rotterdam has about the same number of subscribers as St. Joseph, Missouri. 81% of the St. Joseph subscribers pay less than the minimum rate available in Rotterdam.

Budapest has about the same number of subscribers as St. Paul, Minnesota. 94% of the St. Paul subscribers pay less than the only rate available in Budapest.

Now Paris has been mentioned and compared, for example, with New York City, an exchange about five times as big, and, of course, the \$228 rate, the highest possible, was picked out for New York. It doesn't matter that only $\frac{1}{4}$ to $\frac{1}{2}$ of 1% pay the rate quoted or more, or it would not matter if nobody paid the rate quoted—use it just the same, because it sounds bad for the Bell. Well, now, suppose we compare Paris with New York. The only rate available in Paris is \$77.20—and don't forget you have got to buy your instrument in addition. 79% of the subscribers in New York City pay less than the Paris rate. 90% of the Philadelphia subscribers, and 91% of the Chicago subscribers pay less than the only rate available in Paris.

Now if you get down to the smaller places of this country and abroad, you would find practically no comparison. The foreign rates are, as you will see if you look into that study that I have mentioned to you before, for the smaller places, much higher than the

corresponding rates in this country. In fact, they are abroad, in many cases, practically prohibitive, which explains the impoverished rural telephone development in the foreign countries which have government telephone systems.

Unfairness of Price Comparisons Without Considering Quality

Now, of course, I have not told you the whole story in rate comparisons. What good are rate comparisons if you do not consider what you get for your money? I am not talking now about the quality of service, which, as anyone knows who has traveled abroad, is for the most part much inferior to American telephone service. I am talking now about the length of hours during which the telephone service is available to the public abroad. Take Switzerland, for example—the country with which Mr. Lewis is so in love for statistical purposes. 96% of the exchanges in Switzerland close at 9 o'clock P. M. 46% operate from 7 A. M. to noon; then close two hours for lunch; then open again until 6 P. M.; then close two hours for tea; then, to show that they are not so bad after all, they open at 8 and stay open until 8:30 P. M., then put up the shutters for the night. I am afraid Providence would not stand for that kind of "public service motive."

Or take New Zealand, where the Government has reduced things to so beautiful a basis, and where, incidentally, they have a debt rate of about \$400 per capita; 84% of all their telephone exchanges are not open on Sundays; 80% are not open on holidays; and 60% are open on week days only from 9 A. M. to 5 P. M.

In Belgium, with rates averaging \$10 higher than the Bell System, for comparable towns—in what is known as the Brussels Group, which includes the City of Brussels and environs, and contains more than one-third of all the telephones in the country—out of a total of 23 offices, 21 operate only from 7 A. M. to 9 P. M., and but two of them operate day and night.

Plaintive Appeals from Germany

Or listen to this sad plaint from one of the official representatives in Germany, Herr Wendel, in his speech in the Reichstag, in February, 1913:

"I cannot forego to speak here about the wish expressed by one of our Electoral Districts. I refer here to Freiburg. There the entire telephone service is interrupted at 9 o'clock P. M. Five minutes after 9 o'clock it is impossible to obtain a telephone connection. Now the Town Council of Freiburg has addressed the Postal Administration and asked for the introduction of night telephone service. The Postal Administration has refused the request. It is true that Freiburg is a very pretty, idyllic, and quiet town, and I am glad of it; moreover, the night is not man's friend. I admit this; but it must also be remembered that not all citizens of Freiburg go to roost with the chickens, and a sudden sickness, accident, fire—any kind of trouble—may require a quick telephone call for a physician, or a fire brigade, just as much after 9 o'clock P. M. as prior to that time. It seems to me indefensible that a city of some 30,000 inhabitants should be deprived of telephone service at 9 P. M., and it is the duty of the Postal Administration to get quickly in touch with the Postal Direction of Freiburg or the Upper Postal Direction of Dresden, in order that this justifiable request of the inhabitants may be granted."

And when the telephone subscribers of Germany became so unreasonable as to expect telephone service during lunch hours, here is the assurance they received from the Secretary of the Imperial Postal Administration, who is in charge of the service:

"I have listened to the wish that our telephone exchanges should also be kept open during the noon hours. I wish to state that the various authorities have been instructed to exert themselves along this line. In accordance with the reports which are before me, I can state that 70 per cent. of all our telephone exchanges give service between 12 A. M. and 1 P. M."

Toll Rate Comparisons

Now about toll rates. Our plant in this country is built and operated on the "No delay" basis. Our rates in this country cover the best service only—we have no different kinds of service as they have abroad. Abroad they classify rates as "urgent" and "ordinary." By "urgent" they mean something like the long distance service we give in this country, and for which they charge from two to three times as much as the regular rate which Mr. Lewis quoted. We have only one kind of long distance telephone service, and that is the best that we know how to give. This "ordinary" telephone service in foreign countries is funny. Say you live in Germany: If you want to talk with a friend, you get an assignment. They tell you you can talk with him at 10 o'clock—perhaps that day, perhaps the next day, if the appointments are all taken up. It is put up for you at ten. If you are not there to talk, you are charged. If you are there, you talk three minutes; then you are cut off, and you cannot talk again until your turn comes around again.

And then, in foreign countries, they have another difference, a vastly important one, between their method of charging and our method of charging here in this country. Our rates, except as to nearby points, are got up on what is known as the "particular person" basis. In other words, if you want a long distance call, except to nearby points, you are charged only if you get the party you want. This is not true of the foreign government telephone systems. They have there what is known as the "two number" basis—that is, they give you the connection, you do the talking—if you can—and whether you talk to the party you want, or the office boy, or the janitor, or the stenographer, or to no one at all, they charge you, because they have given you the connection. They sell you the connection, but they do not guarantee to sell you the conversation you want.

Peculiar Comparisons

And here's another point about the rate comparison Mr. Lewis has made. Unfortunately, the gentlemen who prepared the table for Mr. Lewis took the one-hundred-mile rate as the magic point, and then proceeded to show up some beautiful discrepancies between our rates for long distance telephone service, and the corresponding rates abroad. Well, now, it is a fact that 70% to 80% of all toll traffic moves within a radius of from 30 to 50 miles, and within this radius it is found that

our toll rates are, even on a nominal basis, taking into account the differences I have mentioned, lower than in Europe, and if you consider the international toll conversations in Europe, of which there are many, and which Mr. Lewis completely ignored, you find that the foreign rates are from three to four times as high as the rates in this country for corresponding distances. Now when you get out into much longer distances, I grant you that the European systems can quote much lower rates for the service, because they know no one will call their bluff. The service is not a commercial service, and even if some one should take them up, they could afford to charge almost nothing for the rare conversation for long distances if they could charge three or four times as much for the short distances where the bulk of the traffic falls. In European countries they have the magnanimity to make a very cheap rate which covers long and short distances, and you get the short occasionally, but you never get the long. It is true that to distant points our rates are higher, but we quote rates for a *commercial service*, and we have done a remarkable thing in this country which they cannot do in European countries; we have let the telegraph take its natural place. We realize that for short distances the telegraph cannot compare for direct utility with the telephone service, and that for long distances the telegraph cannot be approached for economy by the telephone, because of the terrific cost of tying up lines. When you have a property costing several hundred thousand dollars, you must quote a rate which bears some proportion to the cost of furnishing the service. But we have another means in this country of taking care of this kind of traffic—a thing I want particularly to call to Mr. Lewis' attention: We do not simply sit down and say we cannot give a man a cheap rate for long distances and let it go at that, but we have these lines that are used for long distances, and we lease them to people who will guarantee a fairly continuous service, or who will take the service for a half-hour or an hour a day, and we quote rates that will *move traffic*. The American Telephone and Telegraph Company has, tied up, 214,000 miles of line under lease. Now, Mr. Lewis, what have you done with these lines? You have not counted one message on them. I dare say you do not know they exist. We do not parade them; we saw no need of parading them; we did not need to make any defense of our efficiency, etc., until you came along with your example of the Norwegians and the Luxemburgers, but just the same, we keep that plant in repair, we furnish the wires, we maintain the plant, but we get no credit for it in your showing of efficiency. We are interested solely in giving service; and if we give the service, we are satisfied to let it go at that.

Europe an Armed Camp

Now, Mr. Lewis was kind enough, in his remarks in Congress, to make a statement that, I think, goes far to explain the situation. European governments never took over the telephone because they could do the job better; on the contrary, the people who were running the telephone service were doing the job so well that if the governments had not taken the service over, and stopped competition with the

telegraph service which the governments had from the start, they would have gone bankrupt, and Mr. Lewis knows that that is true. We know that Europe is one armed military camp; we know that when the telegraph came in under the Governments in Europe, it was not as a commercial service, but as a military agency. For the European Governments, the one overwhelming purpose is military necessity and protection. Now we have not this situation here. Our country, fortunately, is not an armed camp.

Prof. Holcombe's Caution

One other thing about the statistics that Mr. Lewis has used. Mr. Lewis has mentioned Professor Holcombe's book on telephones in such a way as to lead one to believe that Professor Holcombe and Mr. Lewis are in accord on the foreign telephone statistics which Mr. Lewis has used. Let me quote you this from Chapter 23, Page 420, of Professor Holcombe's book on "Public Ownership of Telephones":

"'A judicious man,' says Carlyle's 'crabbed satirist,' 'looks at Statistics, not to get knowledge, *but to save himself from having ignorance foisted upon him.*' Statistics have improved somewhat since Carlyle's day. Those published by the International Bureau of Telegraph Administrations at Berne, Switzerland, are carefully compiled and edited. Yet they are no better than their source, the reports of the various governmental administrations. A judicious man will still be careful what he tries to prove by them."

And while we are on the subject of toll rates, I want to remind you that in many of the countries abroad, the governments refused absolutely to build toll lines until the returns on these lines were guaranteed by the local authorities in the cities and villages through which the lines were to be constructed, so that, in many cases, the toll rates charged by the governments do not represent the actual charges, but have been supplemented by the guarantees required by the authorities. For instance, I wonder if Mr. Lewis has seen this in Professor Holcombe's book with regard to Switzerland:

"After another five years of more or less constant negotiations with the commercial interests north of the Alps, they undertook to give on their own sole responsibility the required guarantee. In 1900, a line was opened between Lugano and Zurich, and a second between Bellinzona and Lucerne.

"During the first year after their opening, the traffic over these two lines averaged only thirteen messages a day. Consequently, the receipts amounted only to a bare third of the guaranteed income, and the real cost of the connection to the interests which had demanded it was nearly thrice the nominal rate. Yet the guarantee did not suffice to cover the costs to the administration, for the construction over the Alps proved to be exceptionally expensive."

The same condition prevails in France, where the actual financing of the long distance telephone lines had to be undertaken by local authorities, and sometimes by the private interests in these localities, in addition to the guarantees which were required in return for the investment. That is one of the ways that the foreign government telephone systems (operating, no doubt, in response to Mr. Lewis' law of "public service motive") discouraged the building of lines to what they thought might not be profitable sections

Toll Line Delays Abroad

Now then, after all I have said about telephone toll rates, what kind of service do you get for your money? I wish I had time to give you some adequate indication of the almost universal dissatisfaction in Europe with the kind of toll service that the governments furnish. I will mention one or two instances—I am not exaggerating these in the slightest—I am going to quote to you from official sources. Here, for instance, is a quotation from the speech of Herr Haberland of the German Reichstag:

"Thus, complaint is made of the long time that a subscriber must wait in order to get long distance connections, especially connections between the West and the more central parts of the country, and in particular between Dusseldorf and Berlin. For years the Imperial Post Office has been acquainted with these complaints. In 1907 the Dusseldorf Chamber of Commerce made an investigation and found that the waiting time exceeded two hours. In 1910 it was proved that the average time of waiting to be connected by telephone service between Dusseldorf and Berlin (about 400 miles) was still over one hour, and the average time between Dusseldorf and Mannheim, Dortmund, and Cologne was forty-four, thirty-nine and thirty-four minutes respectively. Later, conditions again grew worse. The average time required to get a connection with Berlin is now one and one-half hours. According to reports from a number of firms, if the operator be requested to get Berlin, the general reply is that unless the conversation is classified as 'Urgent,' the connection will take several hours. In fact, the Administration recommends a scheme of 'Urgent' conversations to overcome the trouble. This remedy, however, is often too expensive for the less wealthy concerns, and, furthermore, it is to be remembered that this forced increase in urgent conversations tends to make the waiting-time still longer in the case of ordinary conversations."

The toll service in France is even more ridiculous. I quote from a few of the many complaints of the French Chambers of Commerce:

Chamber of Commerce of Alais (population 25,000):

"As regards telephone communications, for example, several establishments have indicated that it has been impossible to obtain connections with Marseilles (85 miles) and Lyons (115 miles), even after waiting four hours."

Chamber of Commerce of Rouen (population 125,000):

"We place in the first rank the reforms which we wish for the improvement of the telegraph service, and especially in the telephone service which leaves much to be desired. It takes an average of 55 minutes to secure a connection with Paris (70 miles)."

Chamber of Commerce of Chambéry (population 23,000):

"Telephone communications with Geneva (50 miles), Lyons (60 miles), Paris (280 miles), Grenoble (30 miles), are practically impossible during the greater part of the year, and it is necessary to wait hours for a connection. In the case of Paris one gets the connection the day after the call has been filed."

In other words, if you live in Paris, and happen to be detained in Chambéry, you call your home to-day, you get it to-morrow, and you tell your wife that you won't be home last night. Why, Aviator Gilbert recently flew in an aeroplane from Paris to Rheims, one hundred miles, and he arrived at his destination before the news of his departure could be telephoned.

Peculiar, if not Questionable, Methods of Showing Toll Efficiency

Now, despite this situation, and it is a serious one, and I have a lot of friends who could interest you and give you instances much more

ludicrous than those I have read—I say, despite all this, Mr. Lewis has worked up figures showing a higher efficiency for foreign countries than for the telephone in this country. If the people of this country would only wait, would only take their turn, would file your message, and wait for your chance to talk, we could build up a showing of “efficiency” that would tickle the heart of Mr. Lewis, by putting up just enough circuits to carry the messages filed in a day. We would not have to use so much copper, we would not have to use so much equipment, and we could economize wonderfully on the number of people we have to employ. But do the people want that kind of service? Mr. Lewis, in his comparison of what he calls “adequacy” of telephone facilities, made a great showing for foreign countries by simply dividing the number of messages from toll terminals by the number of telephone stations. Well, just see how ridiculous such a comparison is! If we were to come to Providence to-day and cut down the number of telephones by, say four, so that we had only one-fourth of all the telephones here that you have now, we know we would lose some long distance business, but think what a wonderful quotient you would get for long distance messages per phone! For Mr. Lewis’ statistical purposes, your town would be ideal, but I am frank to say that, for telephone purposes it wouldn’t be much. Now, it is this very fact that shows our superior development in this country. People do not have to leave their homes to telephone. Suppose you put an extension station upstairs in your home. Originally, with one telephone in your home, you had ten calls a day; with your extension station, you may have a total of twelve calls a day. Before you put in your extra station your quotient of “adequacy” was ten; after you put in your extra telephone, it became only six; so that, according to Mr. Lewis, your facilities have become approximately one-half as efficient as they were before. Now, what is the sense of punishing us by this kind of comparison? We don’t want to stop growing in order to show that brand of “efficiency.”

Special Service Ignored by Mr. Lewis

I mentioned before our enormous carrying business on leased lines. Well, we have gone further than that, we have got tie lines. New York City is full of them. We lease you a line from your factory to your office, and you handle the traffic between such places more efficiently; we do all the maintaining, etc. We have got thousands and thousands of these lines in this country, and for that traffic we get no credit in statistical showing, and we want none; we are satisfied that that is good efficient engineering. But these things have got to be considered by any student who wants to arrive at a proper conclusion.

More Niggers in the Woodpile

I am not going to take up in detail all the “niggers” in that extensive woodpile of statistics presented by Mr. Lewis. And these “niggers” are wonderfully numerous. For instance, in counting toll messages, the figures used by Mr. Lewis have been frightfully inflated. Many of these messages, for instance, are counted twice and three

times, as, for instance, international messages. They are counted in the country where they originate, in the country where they terminate, and if they pass through more countries, they are counted in all the countries they pass through. The next time Mr. Lewis makes up a report on this situation, he might look into that. Of course, we haven't got that kind of proposition in this country. We have here enough of a job getting one toll message counted once. And then, again, in many cases, Mr. Lewis' toll messages aren't toll messages at all; for instance, in Germany, Mr. Lewis has used a large number of messages as toll messages which are only, as we are advised by the German Government, a species of no-charge suburban trunk calls, and the number of these improperly included messages for Germany alone is greater than the total number of toll messages in the United States.

Private Ownership the Cause, not the Effect, of our Prosperity

But I am not going to bother with all this. After all, you know that the best test of efficiency and rates is the relative development of the service, and you know how that has worked out. But Mr. Lewis didn't like these facts, they didn't fit in with his theory of public service motive and the law of diminishing returns. So he said the figures didn't mean anything. He said that our superior development was not due to superior efficiency and better rate schedules, but was simply due to our prosperity. Now, isn't that putting the cart before the horse? Is it not true that our magnificent prosperity is due precisely to the manner in which he have handled our affairs? I have gone down to the Battery in New York City many times, and watched the immigrants come in, clad in their quaint garments and carrying their old carpet bags, and I have watched them open their eyes in wonder, and I thought I could see in many of them our future police officers and our car line conductors, and our operators. Why, in Buffalo they have hired a girl to lecture to us in one of our public demonstrations of the telephone. She was an Italian girl who came over to this country within the last few years. Her mother and father still wear the quaint foreign clothes of Italian custom. She was picked out of our operating rooms because she had the most perfect English enunciation of any girl there, and she is now illustrating, in her rich Italian voice, the proper way to use the English tongue. That little instance meant much to me; it was only an illustration of the extent to which opportunity in this country has spelled our wonderful success. Why, it is precisely because of our methods of railroad building, trolley, electric light and other developments, and the development of our magnificent telephone, which has spread itself throughout the country, that we have prosperity in this country. I say our development of the telephone and other enterprises has antedated and been the cause of our prosperity in this country. No, indeed, Mr. Lewis cannot explain away the situation. Our superior telephone development is a fact, and can be accounted for only by the way we have handled it. For see, suppose you go to Europe and take the countries where the telephone is in private hands. See what has been done in that little European country of Denmark,

where most of the telephone development is private. In Denmark they have twice as many telephones per one hundred inhabitants as in Germany, $2\frac{1}{2}$ times as many as in Great Britain, 3 times as many as in the Netherlands, 5 times as many as in Belgium, and 6 times as many as in France. Sweden and Norway, which have some private operation, but not as much as Denmark, rank next, and in the city of Stockholm alone, which is mostly private, they have a larger telephone development than in any other city of the world, with the exception of San Francisco.

Opportunities Abroad

Why, gentlemen, the starved condition of telephone development in the European countries, where the governments operate the service, would offer to American telephone enterprise a most wonderful field! They have not in Europe the disadvantages we have here; they have towns thickly settled; they have not the vast distances that we have to contend with; they have greater possibilities of producing a full volume of traffic, and yet, see where they have landed under government management. It was probably this which Major O'Meara, the Government Consulting Engineer in Great Britain, had in mind when he wrote to us recently, acknowledging a copy of Mr. Vail's annual report. Here is what he says:

"I am writing to thank you for the copy of the Annual Report of the Directors of the American Telephone & Telegraph Company for 1913. I have been much interested in the part of the report dealing with Government Ownership and Operation. After spending over sixteen years out of my thirty-two years public service in the British Post Office Department I have come definitely to the conclusion that a Government Department is, as a rule, an unsuitable organization to manage services of the character of the telegraphs and telephones. And the people in this country have been finding this out for themselves during the past two years."

Is the Post Office Department Really Efficient?

Now I approach that part of the subject that is not very pleasant to me, and that is the question of comparing the efficiency of the Post Office Department with that of the telephone in this country. We telephone people have been busy in the past. We have not had much time to worry about whether or not the Post Office Department was as efficient as it should be. We have been busy enough trying to be as efficient as we could. We have appreciated that the Post Office was properly a government institution, and that part of the burden of this enterprise could very properly be charged to general taxation, because it is placed at the disposal of all, and is used by all alike, and, being a matter of common concern, it is very properly a matter subject to common support. But now, when the Post Office is used as a criterion by which to judge our progress, when, by some mysterious method of computing efficiencies in these services, Mr. Lewis has done something that nobody on earth has ever attempted to do, that is, has not only compared the telephone in one country with the telephone in another by arbitrary

unit equivalents, but has compared the postal service in this country with the utterly dissimilar telephone service in this country,—then, I say, we have to sit up and take notice. Now the telephone fraternity does not want to be understood as criticizing the personnel of the Post Office Department as such. On the contrary, there is a bond of sympathy existing between the telephone officials and those in the postal service. The Post Office personnel has had in the past, and has now, many good and faithful men. We pity them. They have been tied to a post. They have been “postalized” for years—that is my interpretation of “postalization.” Men come into that service full of ambition and energy, and a keen desire to accomplish, and they find, before long, that they are up against a stone wall, that they are hampered on all sides by restrictions and the rigidity of a system which forces them either to get out or float with the stream. Don’t take my word for it,—this is not my opinion. In February, 1908, a Joint Commission, which had been appointed by Congress to investigate the Business Method of the Post Office Department, and of which the Hon. John A. Moon, present Chairman of the House Committee on Post Offices and Post Roads, was a member, submitted its report to Congress. I wish I had time to read you some of the extracts of this report, as a commentary on the alleged efficiency of the Post Office Department, but I mention this, here, as indicating how the defects of the service are not attributable to the personnel, but to the system:

“We also desire to point out that our criticisms are directed at methods, and not at individuals. The higher officials, at any rate, and the best of the staff, are keenly alive to the necessity of reforms; but the service has grown from small beginnings over a long period of years, hampered by restrictive laws which may have been necessary in the past, and may even now be considered necessary to some extent for a government department, but which would render it practically impossible for any private business to survive.”

Initiative and Efficiency Destroyed

How thoroughly the initiative and efficiency of the employee become dissolved into the inertia of their surroundings the moment they enter the Department is indicated in another portion of this report:

“The work of the Department and its development is hindered all along the line by slavish adherence to old methods and to precedents created in previous years, and many reforms which might otherwise be instituted are hindered—if not entirely prevented—by appeals to the decisions of the Comptroller, made, perhaps, many years ago under entirely different conditions. Then, again, the conservatism of Government officials is a generally admitted fact. There is no inducement to employees to suggest improvements in the service for the reason that if these improvements result in greater efficiency or economy of administration they will receive little credit; and, on the other hand, if new methods are not successful they will be charged with the whole blame. Moreover, to suggest improvements which will result in economy is to create hostility among other members of the organization, whose services may thereby be rendered unnecessary. On the other hand, a clerk who adheres to the routine which existed prior to his appointment will be left undisturbed and will receive credit by performing his duties with even a slight degree of efficiency and accepting without comment methods which have been handed down from earlier generations.”

Absence of Accounting Methods

Think of it! Mr. Lewis takes the Post Office Department and constructs efficiency statistics, which he compares with the telephone, when this Joint Commission, which secured the services of some of the most expert firms of accountants in this country, made the following statement in its report to Congress:

"Past experience had disclosed the lack of such a central system of accounts in the Post Office Department as rendered the determination of the cost, profit, or loss in connection with a given line of service impracticable. For more than one hundred years the great and stupendous business of the Post Office Department has been operated without being overhauled or looked into from the standpoint of critical, expert scrutiny of its business methods."

Lack of Cooperation

The following examples, taken haphazard from this official report, will indicate how vast and deep-seated have become the accumulated defects of nearly a century of mismanagement. For instance, as to the total lack of standardization in methods and co-operation between the various branches of the Department, the report says:

"In the course of our investigation into the main subject referred to, we have necessarily had occasion to observe the general methods of administration throughout the Department and service and have been particularly impressed with the divergencies therein in different bureaus, divisions, and sections in handling transactions of a similar character, and we shall show in this report, how, under the present system of administration, these appear to have grown up over a long period of years without any very definite plan. There exists an independence and lack of co-operation not only between different bureaus and different divisions, but even between different sections of the same division, and in identical field operations which must undoubtedly do much to hamper the service and increase its cost."

Evils of Bureaucracy and Over-Centralization

The Commission further calls attention, in the following language, to the effect upon efficiency exercised by the fatal influence of bureaucracy and over-centralization:

"Every request of even the smallest post office, for allowances for any purpose whatever has to be made to the headquarters at Washington. Allowances are, in a large number of cases, for amounts less than \$1. and it would seem that if there were a district superintendent in the field who could pass on such matters it would save a large amount of routine work and consequent expense in the Department at Washington. From the fact that it has to deal with nearly 65,000 postmasters scattered over a vast area of territory, it cannot be in a position to determine intelligently or efficiently upon the needs of each.

"The bureau chiefs appear to spend an increasing amount of their time in the mere routine work of signing formal documents and passing upon requests of various kinds for allowances, or otherwise, which could be intrusted to properly qualified officials in the field without detriment to the postal service. This point recurs at every stage of the inquiry, and appears to call for some radical change in administrative methods if, by the continual growth of the postal business, the Department is not either to lose control over the service or to exercise its control in such a perfunctory manner as to make it practically useless."

Lack of Labor-Saving Devices

Indeed, even in the most simple and rudimentary requirements of efficient administration,—the use of labor-saving devices,—the Commission discloses a surprising condition in the Post Office Department, calling attention to it in the following language:

"There is a lamentable lack of labor-saving devices practically throughout the whole Department and service. Even for such an elementary machine as a typewriter, we are informed that there are hundreds of applications on file which the Department has been quite unable to fill. Of the more valuable machines, such as arithmometers, book-typewriters, and calculating machines, there are few in use, and even in the field post offices such scales as are provided for the special weighing of mails now in progress are of a very inferior grade, and from the information we have gathered it would appear that with few exceptions there are no mechanical conveying devices in any office for expeditiously handling and weighing the mails."

Lack of Efficient Audit System

Examples of this anarchical condition of the postal service, as disclosed by the official report of the Joint Commission, are numerous, but I have not the time to refer to them. I could mention, for instance, the reference the Commission makes to the fact that there is a complete lack of any audit system or any other system which would enable any sort of check as to efficiency to be made. The Commission says, for instance, "We have seen in different efficiency statements of work done, that exactly the same class of work done by individuals has varied in exceptional cases from under 2,000 to over 22,000 operations in the same period of time." And again, referring to the accounting system in this connection, "Our investigation has confirmed the impression gathered from a study of it, that the whole of these methods are crude in the extreme, and such as no private business concern or corporation could follow without the certainty of loss, if not of financial disaster." And yet these conditions in the postal service, which baffled the most expert accountants of the Joint Commission, did not seem to worry Mr. Lewis at all, but he blithely sailed through the whole gamut of postal operations, simply selected his statistics, and, out of the nebulous cloud of unknown and unknowable factors, he pulled forth a marvelous model of efficiency, to shame forever the results of private operation. It did not matter that the Post Office has no plant and practically no equipment, except some mail bags, mail locks, mail boxes, and a few other inconsequential; that the Post Office Department assumes no financial responsibility for any but a small part of the operations in the discharge of postal functions; that even in public buildings, it is the tenant of the Treasury Department, the buildings being constructed and paid for by appropriations expended by the Treasury Department; it did not matter that no rentals are ever collected or computed; that the Post Office expenditures for heating, lighting, repairs, janitor service and supplies are paid for, not from postal, but from other appropriations; that the cost of the Post Office Department at Washington and of the Auditor's office, embracing salaries of more than 1,000 officials and employees, are paid from appropriations known as legisla-

tive, executive and judicial services, never appearing in the postal estimates, accounts and balances. All Mr. Lewis had to do was to get the number of mail pieces, and take the number of postal employees (and, incidentally, Mr. Lewis used a figure for postal employees which is less by 35,000 than the figure given by the Postmaster General three years before in his Annual Report for the year 1909), then divide your mail pieces (as if you could get an average mail piece) by your employees, and presto! you have your efficiency. Now, with us, in the telephone business, there is no trouble about accounting. Our national government knows very well the need of proper accounting, and recognizes it—so far as we are concerned. The Interstate Commerce Commission has prescribed for the Bell System a scheme of accounts as complete, minute and elaborate as any to be found within the whole range of scientific accounting, and it has kept us going some, too, I can tell you, to toe the mark.

Promised Efficiency of Peculiar Kind

There is just one other point about Mr. Lewis' scheme of efficiency that I should like to touch upon, although my time is growing short, and I can only refer to it very briefly. That is the great efficiency Mr. Lewis is going to get by combining the telegraph with the postal service, and eliminating all the so-called extra motions in sending a telegram, by the simple use of a postage stamp. Now you will find all these operations analyzed in the study that we have prepared, that I mentioned to you before, but here is an example of one of the motions that Mr. Lewis is going to cut out by the use of the postage stamp. Under the present system of sending a telegram, the operator has to put down the time of sending and his initials, and the time of receiving and his initials. In fact, this operation is required by law in several States. This is one of the operations that, according to Mr. Lewis, is a useless one, to be cut out by the use of a postage stamp. Think of it! Getting efficiency without knowing when your telegram has been sent, when it has been received, and who sent it, and who received it, in case of delay. And the Post Office system, which is to work this transformation of efficiency—well, I guess you have seen enough samples of the kind of efficiency that the Post Office would inject into the telegraph service. Why, in one of the portions of the Joint Commission's report, we find a list of 19 different operations which are gone through for the simple drawing of a pay warrant, not counting the operations while it is in the hands of the Auditor, and these operations are finally wound up by an office boy, over whom no supervision is exercised.

Is the Parcels Post Really Self-Sustaining?

Now Mr. Lewis, in his talk about "public service motive," dwelt upon the way the parcels post has been working out; how, by the simple injection of the "public service motive" into the business, the parcels post has done a great public work and, at the same time, has made a neat little profit. Now all this would be fine, if it were only so, and I

just want to call Mr. Lewis' attention, and I don't really need to, because he knows it himself, to the debates which have taken place, not so long ago, in Congress, on just this very subject. Mr. Lewis knows that Mr. Kindel—I understand he professes to be a deep and profound student of the parcels post—has made the statement that no one to-day knows what the parcels post costs, that no one knows what it is earning; and that other distinguished Congressmen like Senator Joseph Bristow, of Kansas, who was Chairman of the Senate Committee on Post Offices and Post Roads, which drafted the original parcels post law, has said that there is no way on earth of telling whether the parcels post is making a profit or not. And Mr. Lewis probably knows that Mr. Kindel complained to the Interstate Commerce Commission against the recent changes in the parcels post, and that the only answer he got from Chairman Clark, of the Interstate Commerce Commission, was that the parcels post was in the experimental stage anyway; and that, when Mr. Kindel wanted to find out from Postmaster General Burleson something as to the profit on the parcels post, Mr. Burleson could not furnish a single figure showing anything as to the real cost. So, either Mr. Lewis is possessed of information as to the parcels post which the people at Washington have been vainly seeking, or else his figures on the parcels post profits are members of the same family as his efficiency statistics.

Now I guess I have said enough to show you how the situation stands as to the efficiency of our telephones in this country compared with telephones abroad, and as to the comparisons which have been made between the efficiency of the Post Office of this country and of our telephone system. I have given you the facts, now I will give you one or two reasons.

Permanency of Plan and Purpose Through Continuity of Personnel

In the private telephone system of this country we have Mr. Vail, who has been with the industry from its inception, being the first General Manager of the so-called Bell System, and now its head. Under him, and holding important positions throughout the entire country, are men who have been in the service for years, as your Mr. Potter, Mr. Howard and others, whose sole recommendation for advancement and continuance in the service rests upon their experience and fitness for the positions they hold. Contrast this with the government-owned Post Office, if you please. To quote again from the findings of the Joint Commission:

"It appears too obvious to require argument that the most efficient service can never be expected as long as the direction of the business is, as at present, intrusted to a Postmaster-General and certain assistants selected without special reference to experience and qualifications and subject to frequent change. Before the Postmaster-General and his assistants can become reasonably familiar with the operations of the service they are replaced by others, who, in turn, are called upon to resign before they can, in the nature of things, become qualified by knowledge and experience to perform their allotted task. Under such a system a large railroad, commercial, or industrial business would inevitably go into bankruptcy."

Or, to go one step back of this—"to get behind the scenes"—I quote from a statement by our friend, Mr. Fitzgerald, Chairman of the House Committee on Appropriations, in a special report appearing in the "Congressional Record" of January 20, 1914, wherein he said:

"Under Republican administrations it had been the custom for some years to appoint the chairman of the National Republican Committee Postmaster-General, so that there might be no mistake as to the partisan character of the men appointed as postmasters in the first and second class postoffices in the country. The abuse became so great under Postmaster-General Hitchcock and Postmaster-General Cortelyou that President Taft, a Republican President, was compelled to cry out against the existing conditions and to admit that these partisans not only did not give their time to the public service for which they were paid, but that evidently he was helpless to compel them to do so."

Post Office Troubles of Long Standing

That this condition is not a recent development, but dates back into the distant past, is strikingly illustrated by the comments Postmaster-General Howe had to make with reference to it. In his report, dated November 18, 1882, with reference to salaries and allowances of third and fourth-class postmasters, now amounting to \$25,000,000, he says:

"In theory these orders are made by the First Assistant Postmaster-General; in practice they are made by a fourth-class clerk in the office of the First Assistant. No matter by whom made, this distribution will not be well made. Finite intelligence could not make a wise and just allotment of such a fund; infinite intelligence can not be obtained in fourth-class clerks. Postmasters are eager for large allowances. The most importunate are apt to be best served. They ask earliest and oftenest. They employ every kind of entreaty, offer every kind of influence, personal and political."

And the report of the accountants of the Joint Commission on Business Methods of the Post Office, in commenting upon it, remarks that:

"There is still no standard by which the economical administration of a postoffice can be gauged. Appointments of postmasters are still made almost entirely for political reasons and not by reason of the applicant's ability or knowledge of the workings of the postal service. The criticisms made on the compensation of third and fourth class postmasters still apply to those of the fourth class. This report, reread after a lapse of twenty-five years, gives a striking illustration of the stagnation that has pervaded the whole administration and perpetuated defects which, even at that time, were so glaring as to need the strong condemnation meted out to it by the then Postmaster-General."

Shortness of Tenure the Rule in Post Office

This short and uncertain tenure of office of Postmasters General and their Assistants, including the postmasters of the larger cities,—this series of political gusts which is apt to blow them into office in one political wind, and blow them out in another, has so far made impossible the introduction of any radical and necessary reform; for although the person in office discovers the need, before he can effect the necessary change, political fortune sweeps him out of office again. Whatever progress in efficiency is claimed by one Postmaster-General

is disclaimed by his successor. You are all familiar, for instance, with the serious attempts Mr. Hitchcock made for his reform in his department. Just about the time he began fully to appreciate the true immensity of his task, a political change ended his Post Office career, and such progress as he claimed to have made was promptly repudiated by his successor. For instance, this is what Postmaster-General Burleson had to say about the work of the Department, in a statement given out to the public shortly after taking office:

"The all-absorbing programme of the last Administration was the placing of the Post Office Department on a paying basis," says the report. "The policies pursued in the effort to succeed at this plan were overworked and resulted in defective administration and just criticism on the part of the public.

"That efficiency and economy should be substituted for wastefulness and extravagance needs no argument, but the postal service affects so vitally the interests of the entire population of the country that economy which means a curtailment of postal facilities operates as a check to the social and industrial progress of the country. The people are entitled to the best facilities administered in the most efficient manner. That the facilities furnished during the last four years were not the best is clearly established by the facts."

Post Office Inertia

As illustrating the difficulty of securing any reform under present conditions, I would call your attention to a statement made by Mr. Fitzgerald, Chairman of the Commission on Appropriations, appearing in the "*Congressional Record*" under date of January 20, 1914, wherein he makes the following significant statement:

"The so-called Economy and Efficiency Commission to which the gentleman from Iowa refers, and for which perhaps he has more respect than I have, spent \$260,000 in its work. I have challenged from time to time anyone to point to a single original recommendation which that commission has made which has resulted in the saving of a single dollar to the United States."

The impossibility of accomplishing, under present conditions, any improvement or reform in the service, is true of any of the Governmental Departments handled similarly to the Post Office Department. It is interesting, for instance, to note the report of Mr. French, who, under the administration of President Roosevelt, was commissioned to examine into the condition of the Government Printing office. Mr. French's statement, appearing in the *New York Times* under date of October 10, 1913, reads as follows:

"I never got beyond a preliminary report after about three weeks' work. The work was never finished. The expenditures committee faded away, when a new Congress came in, and there was nothing at all left as evidence that it had existed, except some incomplete and generally irrelevant papers somewhere in dusty pigeon-holes and sundry entries on the ledger of the disbursing clerk of the Senate. My report was among those dust-gathering papers. I doubt if any member of the committee ever read it. It was wholly abortive. My work was entirely useless. The money paid was absolutely wasted. The committee accomplished nothing, and I have often doubted if it ever intended or wished to accomplish anything. It is against the Washington idea to do anything to check expenditures. Yet I was able to show that at least \$1,500,000 a year could be saved in the operating of the Government Printing Office, without disturbing the condition of the workers as to their pay or privileges."

Encouragement of Permanency in Private Enterprise

Efficiency, under such circumstances, is, of course, impossible. Permanency and continuity of personnel are essential to the very heart of an enterprise, and it is precisely because private enterprise recognizes and enforces this principle, that it is so much better equipped than public enterprises to produce satisfactory results. As emphasizing this effort on the part of the corporation to make for loyalty, efficiency and permanency in its personnel, I wish to bring out the treatment of the employees of the telephone interests, in the adoption of its magnificent pension, sickness, disability and insurance plan. The entire plan, aside from the accident feature, which, of course does not take tenure into consideration, is arranged with a view to encouraging and rewarding permanency in employment. The plan provides for the care of employees during sickness and accident, and the pensioning of employees when they reach an age when they cannot render the service necessary to conduct the business of the company. It makes provision for the payment, to the beneficiary, of insurance in cases where the employees die after five years in the company's service,—all of this, without any contribution on the part of the employee other than faithful and conscientious service. The amount of the payments increases with the term of employment. Contrast this with the treatment by the Government of its postal employees. Although continually agitated, no adequate provision has been made for the relief or care of its employees. To refute any notion that the employees in the Government's service are not subject to all of the ills incurred in private employment, it is interesting to note the comment of Mr. Reilly on the floor of the House, as reported in the "*Congressional Record*" of January 16, 1914:

"It was not until I became a member of this body that I learned that old worn-out letter carriers and other superannuated employees of the Government were not retired on part pay, but, on the contrary, were dismissed from the service when they could no longer keep up the pace. One of the first letters I received after being elected a Member of Congress was from an old postal employee, who had received an official notice from his postmaster informing him that he had been off duty the allotted number of days in the year allowed by the department and that his resignation would be accepted. The simple statement of that heart-broken man asking me to assist in having him kept on the rolls made my heart ache. He had spent 34 years of his life pounding the pavements in all kinds of weather and at all hours of the day and night, and was known and loved by the citizens of the community he served, composed of all classes and creeds and political affiliations. He had not only given the best years of his life to the Government in building up the Postal Service, but was at an age and in such a condition that he could not hope to find employment of any kind. He was in such financial straits that if thrown on the world he would have to depend on the bounty of relatives or friends, or else become a public charge."

And in the same issue of the "*Record*" we find the following statement by Mr. Griffen:

"The employees in the Postal Service, and particularly the city and rural carriers, post-office clerks, and laborers, are paid only for the actual time they are employed. When overtaken by sickness or if they meet with an accident and become incapacitated for duty their pay ceases at once. It matters not if an accident was caused by the grossest negligence on the part of the Govern-

ment, these employees have no redress for damages, not even for the loss of salary. They are laid off without pay until they are able to assume their official duties, and should the sickness or accident be of a nature to confine them for a period of more than 150 days they are notified to hand in their resignation, because a department rule provides that no employee will be excused for a longer period, no matter what the cause may be. * * * And now, Mr. Chairman, what is the reward for these men and women who give the best years of their lives to the public service? Well, it is hard for me to say it, because I detest ingratitude, governmental or otherwise, these employees are forced to resign when they become superannuated, unceremoniously kicked out, and told that they are inefficient and can no longer do the work required of them—outlived their usefulness. It is one of the saddest incidents of our governmental life. Thrown out with the flotsam and jetsam of humanity who have no aim or object in life, because years of ardent labor have used up their energy and vitality. Yes, Mr. Chairman, like an obsolete piece of machinery or a broken piston rod, they are thrown on the scrap heap."

How, under these circumstances, can we expect that the efficiency of the Postal Service will in any way approach the present efficiency of the telephone company?

Permanency of Plan Through Continuous Financing

But there is another and very important fundamental difference in the method of management which distinguishes public enterprise from private, and that is, Permanency of plan and purpose through a proper scheme of financing. No enterprise under the sun can be run with a proper regard for the needs of the service, unless there be a continuity of plan and scheme of financing which will not only take care of the present immediate needs, but which will look far enough into the future to assure constant readiness on the part of the utility to serve the needs of those coming after.

There is on file in the Engineering Department of the Bell System, and there is a large corps of employees constantly engaged in the work, a comprehensive series of plans which are known as fundamental development plans. They cover every city of the country in which the system operates, and the studies from these plans anticipate and make provision for growth for 10, 20 and, in some cases, 30 years in advance. The service which is to-day being rendered in many of our cities has been made possible only because, years ago, plans were made, and rigorously followed up by the necessary investment, throughout a continuous period. As an example of anticipating future needs, and as controverting the notion that we have reached the end of our development, there are under way to-day studies and preparations for the future, directed by a staff of 550 expert engineers, scientists, former professors, post graduates, students and scientific investigators, the graduates of over 70 universities. The budget for this year calls for the expenditure of upwards of Sixty Million Dollars for the additions to and betterment in the plant, and provisions have been made to take care of the physical and financial side of the telephone needs of the country for the next year, the year following, and so on, and when the time arrives for the maturing of these plans, there is an *absolute certainty* that these plans will be followed by the necessary investment and by the necessary execution.

Familiar Log-Rolling Methods of Public Enterprises

Contrast this with the way in which public enterprises are financed in this country. Congress, upon assembling each year in December, receives a "Letter from the Secretary of the Treasury." This "letter" is a document of no mean bulk, full of statistics purporting to show how much money the government will have to spend during the coming year to run its business. The document is technically referred to as the Annual Estimates. Now, no Congressman imagines for a minute that these estimates represent the Secretary of the Treasury's mature and deliberate judgment of what it should cost to run the Government for the coming year. Every Congressman knows just how the formidable array of statistics presented to Congress was got up. He knows that the imposing tables of figures were prepared by the various departments at the beginning of their various tasks shortly after July 1st; that the bureaus proceeded solely upon the basis of the current year to guess at their probable needs for a financial year which was not to begin for twelve months to come, and not to end until almost two calendar years had elapsed after the time when the work on the estimates began. He knows, what is more, that the Secretary of the Treasury has practically no say whatever in getting up the estimates,—that, for instance, if the War Department should multiply or divide by ten its previous estimate for river and harbor expenditure, the Secretary must remain silent, and embody the estimate in his "letter."

Running the Appropriation Gauntlet

It is not surprising, therefore, that when the estimates are passed on to the House Appropriation Committees, they are treated as a mere collection of guesses, not to be taken seriously, and to be used as a guide—the roughest of guides—only when political considerations are absent. But political considerations are rarely absent. Only too often, when the needs of a service have become exceedingly pressing, special estimates are compiled after long and scientific study, after laborious and expensive research, to be lightly tossed aside by the Appropriation Committee, because political expediency at the time happens to run counter to the needs of the service. But this is not all. When the nominal needs of the service have adventured through the committees and are presented to the House, they are subjected to the fire of new influences, new opinions, new and extended possibilities of political pressure. And when, in their modified, battered or distorted form, they have passed through the House, they must run the gauntlet of the Senate. Then the Executive approves or disapproves.

The results, of course, are natural. Take a few simple illustrations—actual occurrences in the Post Office Department:

A printing plant in Cincinnati, Ohio, belonging to the City Post Office, shuts up shop. There is plenty of work on hand to keep it busy. But the appropriation happens to have run out. Result: No work for a considerable period—but the salaries of the employees run on as usual, to be paid months later, when a new appropriation can be secured.

Two time-recording clocks in New York City, belonging to the Post Office Department, lie idle for months. Reason: The appropriation has run out. Ten dollars would probably repair the clocks. But not a cent can be spent on the clocks until, several months later, an appropriation can be secured.

The traveling railway mail officials charged with investigating the postal efficiency in the various parts of the country are forced to stop work before the close of the year. Reason: The appropriation has run out. And the salaries are later collected by the officials for the work they didn't and couldn't do.

Uncertainty of Appropriation Bills Constant Menace

These are only a few of the minor illustrations of what is taking place, on a vastly larger scale, in practically every Government Department. Under our system of government, a small majority of either house, or the Executive, may, by cutting off financial support, starve or temporarily paralyze any important public need. Take so vital a branch of government activity as the Federal Civil Service Commission. Not only its vigorous administration, but its very existence, is being threatened annually, not by the repeal of the law under which it exists,—for that would not be tolerated by the sentiment of the country,—but by a small crowd in one house temporarily securing sufficient power to jeopardize its fiscal support. It takes constant lobbying on the part of its friends to keep it from this form of submersion. This is even true of State Legislatures. In the State of Colorado, a few years ago, the Civil Service Commission was absolutely abolished by a failure of the Legislature to provide the necessary appropriation. The recent failure of Congress to appropriate money for the Secretary of War with which to equip the militia with artillery, is another case in point. Picture Mr. Potter going down to Washington and pleading with the Government for a new telephone office on the assumption that he is going to get it, and the Government telling him, "No, Mr. Potter, you will have to wait a while, because the program for this year is five battleships."

Why only recently in a debate in Congress, Mr. Mapes called the attention of the Chairman to the deplorable condition existing in the Supervising Architect's Office, as a result of this financial constriction which obtains in our fiscal system. I quote from the *Congressional Record* of April 7, 1914, pp. 6807 ff.:

"MR. MAPES: Mr. Chairman, I desire to call attention to a few facts in regard to the work of the Supervising Architect's Office. The question of the gentleman from New York is answered very definitely in the hearings—page 106—by the Supervising Architect. It appears from the hearings that the office is behind from five to six years in its work. It takes between three and four years from the time a building is authorized before the Supervising Architect's Office can even begin to prepare the plans and it takes about six years from the authorization of the building before the building is completed.

"The appropriations for this office for the last few years furnish a striking illustration of the evil effects upon the public service of penny-wise and pound-foolish economy. The appropriation bill passed in 1911, after our friends on the other side of the aisle got control of the House, reduced the number of employees in the Supervising Architect's Office by 66, in spite of the fact that

the work of the office was far behind, the number of public buildings authorized was steadily increasing, and the work of the office was getting more and more behind as time went on. The inauguration of the parcel post made it necessary to enlarge old post-office buildings and to build new ones. The Architect's force should have been increased instead of decreased.

"Since that time the office has continued to get more and more behind in its work, until now it is practically six years behind. If no other public buildings were authorized, it would take six years for that office to catch up with the work already assigned to it. It takes from three to four years from the time a public building is authorized by Congress before the Supervising Architect's Office can even commence to give any consideration to the plans for it.

"The Supervising Architect, in the hearings before this committee, on page 106, says:

"The public-buildings act approved March 4, 1913, gave us about four years' work at our present rate of progress. We will not commence work on that bill for one and a half or two years. You might say that we have five and one-half or six years' work ahead of us."

"Again, he says:

"That at our present rate of progress it will not be until the beginning of the calendar year of 1916 that we will commence work on the public buildings act, approved March 4, 1913."

* * * * *

"The Supervising Architect again, on page 107, says:

"We find that our clerical force available for the administrative work incident to the construction of new buildings is not in balance with the technical force. * * * It seems unwise to have so many buildings under construction when we are unable to handle the enormous correspondence and administrative work which naturally follows. Letters accumulate for two or three weeks before they receive attention and the work of construction is delayed; there is complaint all along the line, and we are criticized on the floor of the House. However, it is a condition that we cannot ameliorate under existing circumstances unless you can help us by this balancing of the force."

"There is not a man here who would tolerate a system in his private business that made it necessary to hold up the progress of building operations for two or three weeks, as testified to by the Supervising Architect, on account of not having enough help to answer the correspondence promptly. It is unbusinesslike and wasteful in the extreme to allow such a condition of affairs to exist."

* * * * *

"The distinguished chairman of the Committee on Public Buildings and Grounds, the gentleman from Florida (Mr. Clark), in a speech on the floor of the House on February 20 of this year, page 3985 of the Record, corroborates the statement of the Supervising Architect. * * *

"There is probably not a Member upon this floor who has been here for six years or more, unless he represents a district in one of our large cities, who has not a building authorized for his district which has been pending for three or four years and which to-day appears no nearer being built than it did the day the bill which provided for it passed Congress. Under the methods obtaining, after a building is authorized, the patience of the community is worn threadbare before construction on the foundation is begun. In one place in my district, where I secured an authorization for a post-office building, some of the older inhabitants are beginning to date things back to 'the time when Clark got a building for us,' and yet not a shovel of dirt has been thrown toward preparing for the foundation."

"I do not know how far back into ancient history the act was passed authorizing the public building in his district to which the distinguished chairman of the Committee on Public Buildings and Grounds refers, but he has described a situation that exists all over the country, and yet the Supervising Architect's Office is obliged to get along with an inadequate force. The work continues to pile up and the public service continues to suffer."

Troubles of Foreign Governments

Nor is this condition peculiar to the United States. We find precisely the same principle operating in every foreign government. Take France, for example. The head of the telephone service will submit to the Chamber of Deputies a hundred chapters of minute and elaborate statistics. "We must have so and so many francs for construction and improvement, or the telephone service will continue to deteriorate." The appropriating body will receive the demand, and with it, perhaps, hundreds of chapters of statistics from other departments. Nearly 800 chapters are sometimes submitted by the twelve ministers who constitute the department heads in France. The Budget Committee is literally swamped with statistics. Even if the members were entirely free from political considerations, they could not possibly frame a proper business judgment on the needs of each service. The outcome is only natural. The telephone administration may ask for an appropriation of a hundred million francs to carry out a wise plan of construction and equipment, which would result in annual economies and bring the telephone service up to the requirements of the public. The call is simple: "A stitch in time, to save ninety and nine." But if the appropriation body considers it better, politically, to expend money for warships, or waterways, or public buildings, the telephone budget will be cut in two, and the Telephone Department must shift as best it can on "short rations." This may mean no rations at all, for a hundred millions may be an absolute minimum, without the expenditure of which the proposed construction would be useless. Year in and year out, the official Budget Reporter calls attention to this fatal gap between the public purse and the public plant, and efforts have been made in the past to beseech the Chambers of Commerce to supply the needed investment, because the money could not be obtained in time or at all, from the Government.

A striking example of the results of this policy is furnished by the case of the Gutenberg Exchange, Paris. After a dozen years of telephone stagnation—during which period there were years in which no telephone appropriations were made at all, and years when appropriations were so large that they could not be used before they were withdrawn—the Government installed the "common battery" system in the Gutenberg Exchange. This system had long since been adopted in America, but in France it was still regarded as a new improvement. No sooner was the system installed, than the French Government was warned that unless it provided connections of greater electrical capacity, it would have trouble from the higher voltage. But the warning fell on deaf ears. The Government felt that it had spent enough. The result was a conflagration, which completely reduced the exchange to junk and ashes, and left a large section of the city stranded without telephone communication.

It will be seen, therefore, that some radical change in our method of financing public enterprises—not to be accomplished in one day or one year—is necessary, before we can hope, in the management of our Post Office Department—to approach the efficiency and service af-

forded by private enterprise; some reform which will insure a complete freedom from the gusts of opposing policies—political or otherwise—some system which will provide a reasonable guaranty that deliberate and painstaking planning will be followed by equally deliberate and painstaking execution.

American Optimism Would Not Save Us from Fate of Europe

Of course, we quite naturally must take a great deal of pride in the achievements of American industry (the unfortunate exception being the advocates of Government ownership), and, when looking at our telephone development, it may be that some will say that if this Government undertakes an enterprise of this kind we can avoid, by experience, the pitfalls of foreign nations. However, to steer clear of this erroneous assumption, we only have to consider the wonderful progress which European nations have made in what everyone concedes to be purely governmental enterprises. Take the road-building of France, Germany, England, the canal construction, town planning, magnificent public buildings, drainage, etc., which have served as models for many of our State and municipal enterprises in this country. Consider the unfortunate experience in this country in similar undertakings, with charges of inefficiency, graft, etc., notably the canal and road-building, without mentioning any State. We thus see that, where the governments abroad have confined their efforts to governmental functions we may learn much from them, but where they have departed from that field and entered fields of private enterprise, they have dismally failed where we, retaining private management, have magnificently succeeded.

An Earnest Appeal to Mr. Lewis

In order that this and similar discussions may prove of some constructive value, I want to make an appeal to Mr. Lewis and his friends. Certainly, neither he nor any other right-thinking person, after considering what we have been discussing, would wish to plunge the country into an experiment which, if it should fail, would cripple the business interests and practically destroy any hope of a continuation of our magnificent growth. To remove, so far as possible, any element of danger, will they not at once start a movement for the establishment of efficient business in the Government service? Will they not do the very self-evident and proper thing; compel the adoption by the governmental departments of adequate and modern means of accounting so that every item of expense and income may have its proper place and be considered in determining the relative efficiency of departments one with the other, or with similar departments elsewhere? Will they not actively start a campaign to bring stability into the organization which has charge of our enormous governmental undertakings? Will they not try to make merit alone a determining factor in promoting new officials and retaining old ones?

In doing this, they will have the support of every conservative person and interest in the country, particularly organizations such as the

Providence Economic Club and the Merchants' Association of New York, which, at present, occupies a peculiar position. That organization was foremost in its determination to secure a revision in the express rates, and, under our magnificent plan of governmental control, secured relief for the business interests of the country in the promulgation by the Interstate Commerce Commission of a new rate schedule and zone system. That same organization was strong in its support of Mr. Lewis and others in connection with the adoption by the Government of the parcels post feature of our postal system. They readily recognized the proper place for this new and valuable service. But that same organization is to-day waging an active fight to prevent the absolute destruction of the express system,—a service which is needed by every business interest in the country. That same organization is to-day waging this same campaign which we are asking Mr. Lewis, with his great ability, to father, namely, one which will result in the elimination of ignorance and guess in measuring the true results of postal operations, whereby the service may be reconstructed and placed upon a modern and efficient basis.

The Time to Seriously Consider the Question

When Mr. Lewis and his friends have brought about the result that the Post Office Department of this country is managed on an economical and scientific basis; when the Postmaster-General is secure in his tenure, so long as he is efficient and active; when his subordinates are appointed solely on account of ability; when they are retained and promoted as a reward for faithful service; when the Government has adopted a fair and equitable scheme of pension and benefits for its employees; and when the Government has brought about a condition where appropriations are made the result of careful and conscientious study by its officers, and not, as at present, made a football for ambitious and unscrupulous politicians, subject to all of the evils of log-rolling and political bickering,—then, I say, and not until then, will we be in a position for a proper and judicious discussion of the effect of so radical a movement as Mr. Lewis proposes. At that time we, as employees, will have no objection to the serious consideration of such a question, perfectly secure in the thought that this service, the thing we are all striving for, will be reasonably safe.

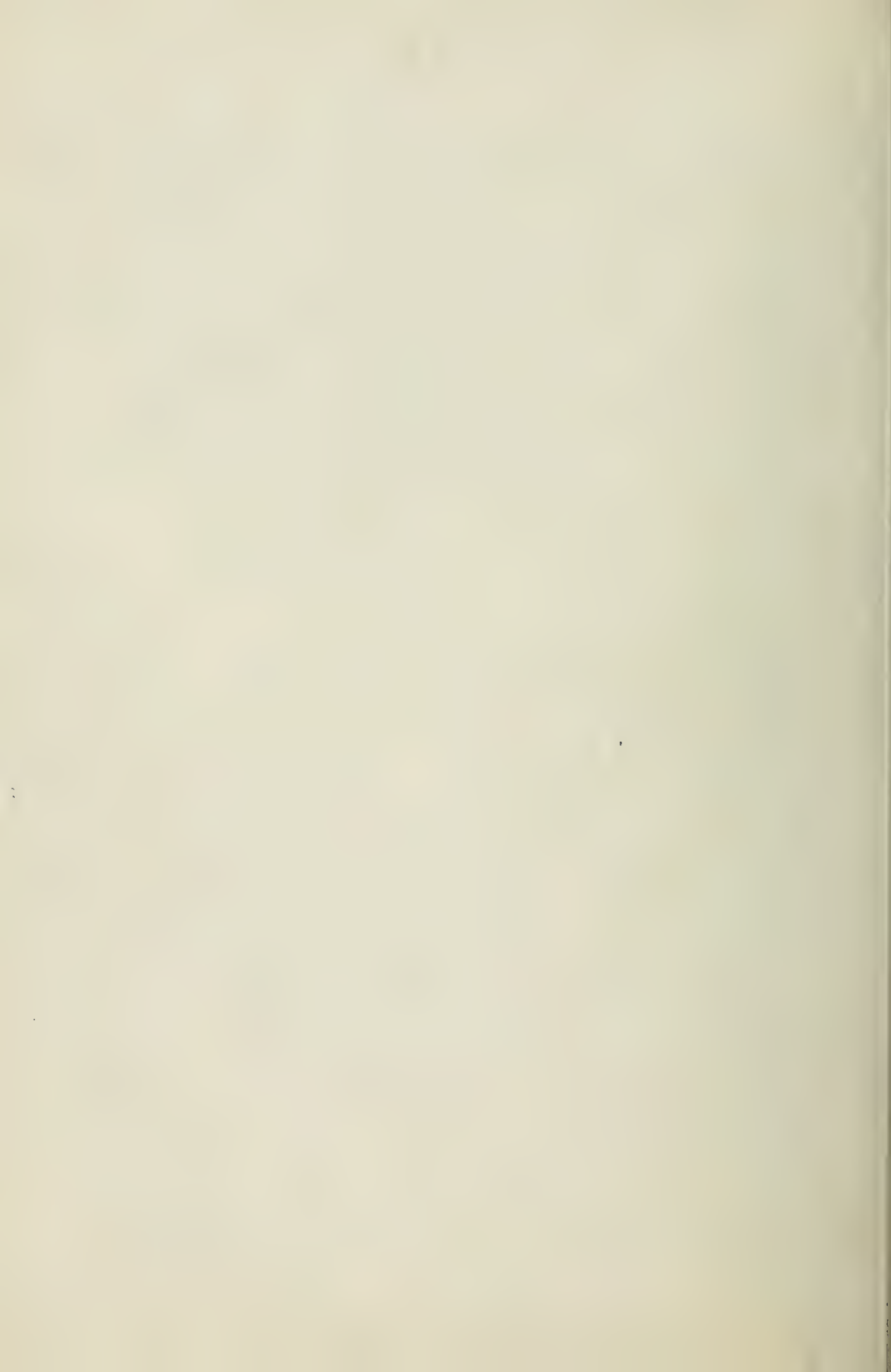
President Wilson's Conservative Position

As showing that the task I am asking Mr. Lewis and his friends to assume is worthy of his mettle, I want to quote from President Woodrow Wilson, in his work, "The State":

"But the proposition that the government should control such dominating organizations of capital may by no means be wrested to mean by any necessary implication that the government should itself administer those instrumentalities of economic action, which cannot be used except as monopolies. Government regulation may in most cases suffice. Indeed, such are the difficulties in the

way of establishing and maintaining careful business management on the part of the government that control ought to be preferred to direct administration in as many cases as possible—in every case in which control without administration can be made effectual.”

I feel confident that the “difficulties in the way of establishing and maintaining careful business management on the part of the Government” will not prevent our good friend Mr. Lewis from tackling the problem, and I wish to say that if he is a big enough man, should he fail in his efforts to establish proper business management on behalf of the department to which he wishes to entrust the future of this important industry, he would undoubtedly be the first to demand that further attempts at extending the functions of the Post Office Department be suspended until, with the support of some new movement, there is first established such efficiency in management on the part of the Government as will insure continuance of “good service”—the thing which alone counts. Gentlemen, I thank you.



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TELEPHONE & TELEGRAPH STATISTICS OF THE WORLD

JANUARY 1, 1913

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Note: For the completeness of these statistics we are indebted to foreign governments, private companies and the U. S. Census Bureau. To them much appreciation and thanks are due.

BULLETIN No. 2

Issued April, 1914

(Supplementing and bringing up to date some data previously appearing in "Telephone Statistics of the World" [Bulletin No. 1] issued May 1, 1912)

AMERICAN TELEPHONE AND TELEGRAPH CO.

OFFICE OF STATISTICIAN

1—Telephone Stations of the World, by Countries

January 1, 1913

	Number of Stations			Per Cent. of Total World	Stations per 100 Population	Population per Square Mile
	Government	Private	Total			
NORTH AMERICA:						
United States	—	8,729,592+	8,729,592+	64.32%	9.1	31.
Canada (incl. Newfoundland) ..	85,664	345,388	431,052	3.19%	5.6	2.
Central America*	2,970	4,213	7,183	.05%	.1	26.
Mexico*	1,319	37,971	39,290	.29%	.2	19.
Other N. A. Places*	—	1,406	1,406	.01%	2.0	.1
West Indies:						
Cuba	—	12,000	12,000	.09%	.5	50.
Porto Rico	—	3,195	3,195	.02%	.3	310.
Other W. I. Places*	1,832	4,326	6,158	.04%	.1	116.
Total	91,785	9,138,091	9,229,876	68.01%	6.9	15.
SOUTH AMERICA:						
Argentina	—	63,747	63,747	.47%	.9	6.3
Bolivia*	—	2,500	2,500	.02%	.1	3.2
Brazil*	1,095	22,905	24,000	.18%	.1	6.7
Chile*	—	26,000	26,000	.19%	.7	12.0
Colombia*	—	1,800	1,800	.01%	.4	11.6
Ecuador*	380	2,320	2,700	.02%	.2	13.0
Paraguay	—	490	490	.00%	.06	4.6
Peru*	—	4,000	4,000	.03%	.09	6.6
Uruguay	—	9,485	9,485	.07%	.8	15.4
Venezuela*	428	4,219	4,647	.04%	.2	6.9
Other Places*	1,365	—	1,365	.01%	.3	2.6
Total	3,268	137,466	140,734	1.04%	.3	7.0
EUROPE:						
Austria	161,230	—	161,230	1.19%	.5	251.
Belgium	58,640	—	58,640	.43%	.8	666.
Bosnia*	850	—	850	.01%	.04	105.
Bulgaria*	3,200	—	3,200	.02%	.07	119.
Denmark (Mar. 31, 1913)	1,467	116,931	118,398	.87%	4.2	188.
Finland	—	35,200	35,200	.26%	1.1	22.
France	293,195	—	293,195	2.16%	.7	191.
German Empire	1,302,672	—	1,302,672	9.60%	1.9	319.
Great Britain (Mar. 31, 1913) ..	738,738	—	738,738	5.44%	1.6	379.
Greece	3,097	—	3,097	.02%	.1	107.
Hungary	75,738	—	75,738	.56%	.4	169.
Italy (Apr. 30, 1913)	57,693	31,473	89,166	.66%	.2	315.
Luxemburg	3,910	—	3,910	.03%	1.5	265.
Netherlands	54,603	22,592	77,195	.57%	1.3	476.
Norway*	38,000	37,000	75,000	.55%	3.1	19.
Portugal	1,172	6,868	8,040	.06%	.1	156.
Roumania*	21,000	—	21,000	.16%	.3	143.
Russia	121,076	161,405	282,481	2.09%	.2	69.
Servia	3,606	—	3,606	.03%	.1	161.
Spain*	1,700	32,300	34,000	.25%	.2	100.
Sweden	148,372	69,182	217,554	1.60%	3.9	32.
Switzerland	90,573	—	90,573	.66%	2.3	240.
Other Places*	—	1,880	1,880	.01%	.03	60.
Total	3,180,532	514,831	3,695,363	27.23%	.8	119.
ASIA:						
British India	5,731	9,795	15,526	.11%	.007	222.
China*	8,227	9,546	17,773	.13%	.004	265.
Japan (Mar. 31, 1913)	198,435	—	198,435	1.46%	.4	353.
Other Places*	20,400	5,872	26,272	.20%	.01	16.
Total	232,793	25,213	258,006	1.90%	.3	57.
AFRICA:						
Egypt	3,098	12,998	16,096	.12%	.1	28.
Union of South Africa	24,393	—	24,393	.18%	.4	12.
Other Places	16,311	—	16,311	.12%	.01	11.
Total	43,802	12,998	56,800	.42%	.04	12.
OCEANIA:						
Australia	121,020	—	121,020	.89%	2.6	1.5
Dutch East Indies	9,536	3,186	12,722	.09%	.03	64.
Hawaii	—	6,047	6,047	.05%	3.1	29.
New Zealand (Mch. 31, 1913) ..	42,934	—	42,934	.32%	4.0	10.
Philippine Islands*	1,500	4,474	5,974	.04%	.07	67.
Other Places*	1,368	30	1,398	.01%	.06	5.
Total	176,358	13,737	190,095	1.40%	.35	13.
Total World	3,728,538	9,842,336	13,570,874	100.00%		

*Partly estimated

+U. S. Census, 1912

2—Telephone and Telegraph Wire of the World, by Countries

January 1, 1913

		Miles of Telephone Wire			Miles of Telegraph Wire (See Note)		
	Operated by	Number of Miles	Per Cent. of Total World	Per 100 Population	Number of Miles	Per Cent. of Total World	Per 100 Population
NORTH AMERICA:							
United States	P.	20,248,326+	60.89%	21.03	1,814,196+	34.91%	1.9
Canada	P. G.	910,236	2.74	11.9	195,825	3.77%	2.5
Central America*	P. G.	15,605	.05%	.3	16,110	.31%	.3
Mexico*	P. G.	95,375	.29%	.6	49,169	.95%	.3
Other N. A. Places*	P. G.	1,940		2.8	1,064	.02%	1.5
West Indies:							
Cuba	P.	35,719	.10%	1.6	6,312	.12%	.3
Porto Rico	P.	3,213	.01%	.3	631	.01%	.06
Other W. I. Places*	P. G.	13,347	.04%	.3	2,512	.05%	.05
Total.		21,323,761	64.11%	16.0	2,085,819	40.14%	1.6
SOUTH AMERICA:							
Argentina	P.	184,442	.55%	2.6	128,743	2.48%	1.8
Bolivia*	P. P.	1,500		.07	5,998	.12%	.2
Brazil*	P. G.	40,000	.12%	.2	37,786	.73%	.2
Chile*	P. P.	40,000	.12%	1.1	22,334	.43%	.6
Colombia*	P. P.	1,800	.01%	.03	11,280	.22%	.2
Ecuador*	P. G.	2,200	.01%	.1	3,316	.06%	.2
Paraguay	P. P.	342		.04	2,632	.05%	.3
Peru*	P. P.	10,557	.03%	.2	6,494	.12%	.1
Uruguay	P. P.	20,789	.07%	1.9	5,884	.11%	.5
Venezuela*	P. G.	11,178	.03%	.4	4,920	.10%	.2
Other Places*	G.	2,830	.01%	.6	725	.01%	.2
Total.		315,638	.95%	.6	230,112	4.43%	.5
EUROPE:							
Austria	G.	321,645	.97%	1.1	97,880	1.89%	.3
Belgium	G.	185,349	.56%	2.4	27,563	.53%	.4
Bosnia*	G.	2,000	.01%	.1	4,700	.09%	.2
Bulgaria*	G.	8,000	.02%	.2	9,450	.18%	.2
Denmark	P. G.	303,816	.91%	10.9	8,076	.15%	.3
France	G.	1,060,052	3.19%	2.7	387,917	7.46%	1.0
German Empire	G.	4,175,782	12.56%	6.3	434,818	8.37%	.7
Great Britain (Mainland)	G.	2,360,000	7.09%	5.1	310,872	5.98%	.7
Greece	G.	5,368	.02%	.2	9,864	.19%	.4
Hungary	G.	252,751	.76%	1.2	95,511	1.84%	.4
Italy	P. G.	194,000	.58%	.6	129,425	2.49%	.4
Luxemburg	G.	3,950	.01%	1.5	712	.01%	.3
Netherlands	P. G.	193,308	.58%	3.2	23,749	.46%	.4
Norway*	P. G.	160,000	.48%	6.6	13,799	.26%	.5
Portugal	P. G.	28,736	.09%	.5	14,062	.27%	.3
Roumania*	G.	55,000	.16%	.8	13,500	.26%	.2
Russia and Finland*	P. G.	434,000	1.31%	.3	315,000	6.06%	.2
Serbia	P. G.	6,956	.02%	.2	5,188	.10%	.2
Spain*	P. G.	68,000	.20%	.3	54,600	1.05%	.3
Sweden	P. G.	279,312	.84%	4.9	20,161	.39%	.4
Switzerland	G.	234,280	.70%	6.1	16,476	.32%	.4
Other Places*	P.	2,499	.01%	.03	2,546	.05%	.04
Total.		10,334,804	31.07%	2.3	1,995,869	38.40%	.4
ASIA:							
British India	P. G.	24,166	.07%	.01	291,765	5.62%	.1
China*	P. G.	35,000	.11%	.01	51,136	.98%	.01
Japan (Mainland)	G.	485,982	1.46%	.9	122,968	2.37%	.2
Other Places*	P. G.	60,876	.18%	.03	92,701	1.78%	.04
Total.		606,024	1.82%	.06	558,570	10.75%	.06
AFRICA:							
Egypt	P. G.	58,689	.18%	.5	13,316	.26%	.1
Union of South Africa	G.	68,997	.21%	1.2	56,860	1.09%	.9
Other Places*	G.	30,212	.09%	.03	107,571	2.07%	.09
Total.		157,898	.48%	.1	177,747	3.42%	.1
OCEANIA:							
Australia	G.	372,011	1.12%	8.0	101,218	1.95%	2.2
Dutch East Indies	P. G.	47,639	.14%	.1	15,874	.31%	.04
Hawaii*	P.	12,000	.04%	6.2	—	.00%	.0
New Zealand	G.	64,600	.19%	6.0	24,297	.47%	2.3
Philippine Islands*	P. G.	24,400	.07%	.3	5,595	.10%	.06
Other Places*	P. G.	3,159	.01%	.1	1,790	.03%	.08
Total.		523,809	1.57%	1.0	148,774	2.86%	.3
Total World.		33,261,934	100.	1.9	5,196,891	100.	.3

Note: Telegraph is operated by Government, except in the United States.

P.—Private Companies
G.—Government
P. G.—Private Companies and Government

†U. S. Census, 1912
*Partly Estimated

3—Telephone and Telegraph Gross Earnings of the World, by Countries

(NEAREST FISCAL PERIOD—YEAR 1912)

		Annual Gross Earnings (Partly Estimated)			Per Cent. of Total		Telephone Earnings per Station
		Telephone	Telegraph (See Note)	Total	Telephone	Telegraph	
NORTH AMERICA:		Operated by					
United States	P.	\$282,172,000*	\$52,337,000†	\$334,509,000	84.3%	15.7%	\$33.00
Canada (incl. Newfoundland) ..	P. G.	13,268,000	5,450,000	18,718,000	70.9%	29.1%	33.70
Central America	P. G.	428,000	1,559,000	1,987,000	21.5%	78.5%	62.90
Mexico	P. G.	1,198,000	1,208,000	2,406,000	49.8%	50.2%	36.20
Other N. A. Places	P. G.	56,000	176,000	232,000	24.1%	75.9%	40.50
West Indies:							
Cuba	P.	760,000	200,000	960,000	79.2%	20.8%	68.10
Porto Rico	P.	152,000	63,000	215,000	70.7%	29.3%	50.00
Other W. I. Places	P. G.	185,000	251,000	436,000	42.4%	57.6%	32.10
Total		\$298,219,000	\$61,244,000	\$359,463,000	83.0%	17.0%	\$33.10
SOUTH AMERICA:							
Argentina	P.	\$ 2,735,000	\$ 5,663,000	\$ 8,398,000	32.6%	67.4%	\$44.20
Bolivia	P.	75,000	111,000	186,000	40.3%	59.7%	33.30
Brazil	P. G.	960,000	3,357,000	4,317,000	22.3%	77.7%	42.40
Chile	P.	780,000	558,000	1,338,000	58.3%	41.7%	30.90
Colombia	P.	54,000	364,000	418,000	12.9%	87.1%	20.60
Ecuador	P. G.	54,000	78,000	132,000	41.0%	59.0%	45.20
Paraguay	P.	19,000	35,000	54,000	35.2%	64.8%	30.80
Peru	P.	120,000	137,000	257,000	46.7%	53.3%	53.50
Uruguay	P.	500,000	143,000	643,000	77.8%	22.2%	51.20
Venezuela	P. G.	236,000	62,000	298,000	79.2%	20.8%	31.40
Other Places	G.	41,000	18,000	59,000	69.5%	30.5%	
Total		\$ 5,574,000	\$10,526,000	\$ 16,100,000	34.6%	65.4%	\$41.00
EUROPE:							
Austria	G.	\$ 5,110,500	\$ 3,660,000	\$ 8,770,500	58.3%	41.7%	\$33.60
Belgium	G.	2,892,400	1,408,700	4,301,100	67.2%	32.8%	52.20
Bosnia	G.	27,700	184,500	212,200	13.2%	86.8%	33.50
Bulgaria	G.	122,400	333,000	455,400	26.8%	73.2%	40.60
Denmark	P. G.	2,759,700	561,900	3,321,600	83.1%	16.9%	24.50
France	G.	11,707,500	9,869,500	21,577,000	54.3%	45.7%	42.20
German Empire	G.	44,481,400	10,514,000	54,995,400	80.9%	19.1%	35.80
Great Britain	G.	28,000,000	15,393,600	43,393,600	64.5%	35.5%	38.90
Greece	G.	45,800	431,000	476,800	9.6%	90.4%	15.50
Hungary	G.	2,929,900	2,025,300	4,955,200	59.1%	40.9%	40.90
Italy	P. G.	2,906,200	5,253,000	8,159,200	35.6%	64.4%	34.00
Luxemburg	G.	81,900	22,600	104,500	78.4%	21.6%	21.90
Netherlands	P. G.	2,542,300	1,085,600	3,627,900	70.1%	29.9%	34.30
Norway	P. G.	1,523,900	780,500	2,304,400	66.2%	33.8%	20.00
Portugal	P. G.	324,500	700,000	1,024,500	31.6%	68.4%	42.80
Roumania	G.	414,000	706,700	1,120,700	37.0%	63.0%	20.50
Russia and Finland	P. G.	8,873,500	16,189,600	25,063,100	35.4%	64.6%	30.30
Serbia	G.	111,300	171,800	283,100	39.2%	60.8%	31.50
Spain	P. G.	1,417,200	2,124,400	3,541,600	40.0%	60.0%	43.20
Sweden	P. G.	4,900,900	727,000	5,627,900	87.1%	12.9%	23.40
Switzerland	G.	2,657,900	912,400	3,570,300	74.4%	25.6%	30.40
Other Places	P.	37,600	76,000	113,600	33.3%	66.7%	21.10
Total		\$123,868,500	\$73,131,100	\$196,999,600	62.9%	37.1%	\$35.10
ASIA:							
British India	P. G.	\$ 729,700	\$ 4,902,500	\$ 5,632,200	13.0%	87.0%	\$50.60
China	P. G.	560,200	4,969,000	5,529,200	10.1%	89.9%	35.10
Japan	G.	6,206,400	4,169,000	10,375,400	59.8%	40.2%	34.70
Other Places	P. G.	994,000	3,743,800	4,737,800	21.0%	79.0%	39.40
Total		\$ 8,490,300	\$17,784,300	\$ 26,274,600	32.3%	67.7%	\$36.20
AFRICA:							
Egypt	P. G.	\$ 756,500	\$ 718,800	\$ 1,475,300	51.2%	48.8%	\$48.80
Union of South Africa	G.	1,247,400	1,875,900	3,123,300	39.9%	60.1%	55.40
Other Places	G.	652,400	1,624,700	2,277,100	28.6%	71.4%	43.30
Total		\$ 2,656,300	\$ 4,219,400	\$ 6,875,700	38.6%	61.4%	\$50.00
OCEANIA:							
Australia	G.	\$ 3,657,300	\$ 3,796,100	\$ 7,453,400	49.1%	50.9%	\$32.10
Dutch East Indies	P. G.	525,000	731,800	1,256,800	41.8%	58.2%	44.40
Hawaii	P.	302,000		302,000	100.0%		50.30
New Zealand	G.	1,288,000	1,525,800	2,813,800	45.8%	54.2%	32.10
Philippine Islands	P. G.	258,800	236,600	495,400	52.3%	47.7%	44.40
Other Places	P. G.	42,000	23,000	65,000	64.6%	35.4%	33.80
Total		\$ 6,073,100	\$ 6,313,300	\$ 12,386,400	49.0%	51.0%	\$34.00
Total World		\$444,881,200	\$173,218,100	\$618,099,300	72.0%	28.0%	\$33.90

Note: Telegraph is operated by Governments, except in the United States.

P.—Private Companies
G.—Government
P. G.—Private Companies and Government

*Partly estimated to include ALL companies and lines
†U. S. Census, 1912

4—Telephone Investment of the World, by Countries

January 1, 1913

	Operated by	Investment (Partly estimated)	Per Cent. of Total World	Investment per Station
NORTH AMERICA:				
United States	P.	\$1,094,800,000*	57.44%	\$125
Canada	P. G.	58,984,000	3.09%	147
Central America	P. G.	1,000,000	.05%	139
Mexico	P. G.	5,264,000	.27%	134
Other North America Places	P. G.	190,000	.01%	135
West Indies:				
Cuba	P.	10,908,000	.58%	909
Porto Rico	P.	513,000	.03%	160
Other West Indies Places	P. G.	954,000	.05%	155
Total		\$1,172,613,000	61.52%	\$127
SOUTH AMERICA:				
Argentina	P.	\$ 14,769,000	.77%	\$232
Bolivia	P.	375,000	.02%	150
Brazil	P. G.	3,800,000	.20%	160
Chile	P.	3,732,000	.20%	144
Colombia	P.	398,000	.02%	221
Ecuador	P. G.	1,270,000	.07%	470
Paraguay	P.	78,000	.00%	160
Peru	P.	539,000	.03%	135
Uruguay	P.	1,585,000	.08%	167
Venezuela	P. G.	1,299,000	.07%	279
Other Places	G.	137,000	.01%	100
Total		\$ 27,982,000	1.47%	\$199
EUROPE:				
Austria	G.	\$ 34,000,000	1.78%	\$211
Belgium	G.	16,163,000	.85%	276
Bosnia	G.	300,000	.02%	353
Bulgaria	G.	585,000	.03%	183
Denmark	P.	11,982,000	.63%	101
Finland	P.	2,820,000	.15%	80
France	G.	75,380,000	3.95%	257
German Empire	G.	232,537,000	12.20%	178
Great Britain	G.	131,309,000	6.89%	178
Greece	G.	542,000	.03%	175
Hungary	G.	14,580,000	.76%	192
Italy	P. G.	12,600,000	.66%	141
Luxemburg	G.	689,000	.04%	176
Netherlands	P. G.	12,690,000	.66%	164
Norway	P. G.	7,218,000	.38%	96
Portugal	P. G.	1,235,000	.06%	153
Roumania	G.	2,580,000	.13%	123
Russia	P. G.	30,336,000	1.60%	107
Servia	G.	630,000	.03%	174
Spain	P. G.	5,100,000	.27%	150
Sweden	P. G.	25,279,000	1.33%	116
Switzerland	G.	17,182,000	.90%	190
Other Places	P.	188,000	.01%	100
Total		\$ 635,925,000	33.36%	\$172
ASIA:				
British India	P. G.	\$ 1,552,000	.08%	\$100
China	P. G.	2,932,000	.16%	165
Japan	G.	21,472,000	1.13%	108
Other Places	P. G.	2,466,000	.13%	94
Total		\$ 28,422,000	1.50%	\$110
AFRICA:				
Egypt	P. G.	\$ 2,254,000	.12%	\$140
Union of South Africa	G.	7,396,000	.38%	303
Other Places	G.	1,631,000	.09%	100
Total		\$ 11,281,000	.59%	\$198
OCEANIA:				
Australia	G.	\$ 19,763,000	1.03%	\$163
Dutch East Indies	P. G.	1,328,000	.07%	104
Hawaii	P.	565,000	.03%	93
New Zealand	G.	7,000,000	.37%	163
Philippine Islands	P. G.	1,022,000	.05%	171
Other Places	P. G.	140,000	.01%	100
Total		\$ 29,818,000	1.56%	\$157
Total World		\$1,906,041,000	100. %	\$140

P.—Private Companies

G.—Government

P. G.—Private Companies and Government

*Partly estimated to include ALL companies and lines

5—Comparative Table of First-Class Mail, Telegraph and Telephone Traffic

(PARTLY ESTIMATED)

EUROPE AND UNITED STATES

(NEAREST FISCAL PERIOD—YEAR 1912)

Countries	Telephone Conversations†	Telegrams* (See Note)	Total Telephone Conversations and Telegrams	Mail	Per Cent. of Total Traffic		
					Telephone Conversations and Telegrams	Mail	
	Operated by						
Austria	G.	364,578,000	23,866,000	388,444,000	1,642,006,000	19%	81%
Belgium	G.	138,028,000	9,460,000	147,488,000	384,641,000	28%	72%
Bosnia	G.	1,500,000	1,000,000	2,500,000	25,665,000	9%	91%
Bulgaria	G.	7,500,000	2,300,000	9,800,000	44,455,000	18%	82%
Denmark	P. G.	226,666,000	3,878,000	230,544,000	163,700,000	58%	42%
France	G.	396,102,000	67,120,000	463,222,000	1,723,958,000	21%	79%
German Empire	G.	2,324,880,000	64,309,000	2,389,189,000	5,450,565,000	30%	70%
Great Britain.....	G.	1,098,395,000	88,494,000	1,186,889,000	4,197,300,000	22%	78%
Greece	G.	3,000,000	1,970,000	4,970,000	19,777,000	20%	80%
Hungary	G.	203,357,000	13,979,000	217,336,000	605,974,000	26%	74%
Italy	P. G.	230,000,000	25,315,000	255,315,000	755,480,000	25%	75%
Luxemburg	G.	4,920,000	260,000	5,180,000	21,818,000	19%	81%
Netherlands	P. G.	169,711,000	7,077,000	176,788,000	299,428,000	37%	63%
Norway	P. G.	170,000,000	4,000,000	174,000,000	95,831,000	64%	36%
Portugal	P. G.	7,000,000	5,000,000	12,000,000	57,899,000	17%	83%
Roumania	G.	20,000,000	4,300,000	24,300,000	74,511,000	25%	75%
Russia and Finland.....	P. G.	900,000,000	45,000,000	945,000,000	1,464,257,000	39%	61%
Servia	G.	5,927,000	2,385,000	8,312,000	28,681,000	22%	78%
Spain	P. G.	35,000,000	6,600,000	41,600,000	143,054,000	23%	77%
Sweden	P. G.	434,163,000	4,996,000	439,159,000	199,764,000	69%	31%
Switzerland	G.	68,569,000	6,494,000	75,063,000	376,638,000	17%	83%
Total Europe.....	P. G.	6,809,296,000	387,803,000†	7,197,099,000	17,775,402,000	29%	71%
Per 1,000 population		15,172	864	16,036	39,607		
United States.....	P.	15,600,000,000	112,660,000	15,712,660,000	10,212,237,000	61%	39%
Per 1,000 population		161,995	1,170	163,165	106,047		

Note: Telegraph is operated by Government, except in the United States.

‡As officially reported

P.—Private Companies

G.—Government

P. G.—Private Companies and Government

* Included in the number of telegrams for each European country are government and service messages, also international messages (incoming, outgoing and transit).

† Includes duplications arising from the European practice of counting each international message in each country handling the message.

6—Telephone Development of each City in Europe with over 500,000 Population January 1, 1913

	Population	Number of Stations	Stations per 100 Population
Amsterdam	581,000	15,953	2.7
Barcelona	587,000	5,063	.9
Berlin (Exchange Area)	2,320,000	144,543	6.2
Birmingham (Exchange Area)	1,069,000	18,055	1.7
Breslau	537,000	18,533	3.5
Brussels (Exchange Area)	838,681	21,470	2.6
Budapest	880,000	24,567	2.8
Cologne	541,000	23,158	4.3
Copenhagen (Exchange Area)	608,000	50,802	8.4
Dresden	558,000	23,728	4.3
Glasgow (Exchange Area)	1,150,000	41,500	3.6
Hamburg-Altona (Exchange Area)	1,207,000	71,222	5.9
Kief	506,000	4,635	.9
Leeds (Exchange Area)	506,000	10,657	2.1
Leipzig	617,000	28,245	4.6
Liverpool (Exchange Area)	1,000,000	31,764	3.2
London (Exchange Area)	7,280,000	244,320	3.4
Lyons	547,000	7,039	1.3
Madrid	600,000	4,031	.7
Manchester (Exchange Area)	1,200,000	29,453	2.5
Marseilles	565,000	7,735	1.4
Milan	599,000	10,900	1.8
Moscow	1,533,400	43,348	2.8
Munich	606,000	33,168	5.5
Naples	723,000	3,600	.5
Newcastle (Exchange Area)	550,000	10,980	2.0
Odessa	505,600	6,842	1.3
Paris	2,940,000	95,033	3.2
Rome	539,000	10,400	2.0
Sheffield (Exchange Area)	625,000	10,605	1.7
St. Petersburg	1,686,000	47,649	2.8
Vienna	2,115,000	56,747	2.7
Warsaw	872,478	28,935	3.3
Total of the above 33 European cities	36,992,159	1,184,680	3.2
Total of the 11 cities in U. S. with over 500,000 population	15,264,000	1,585,809	10.4

NOTE: Constantinople excluded from above, as the telephone was not in operation Jan. 1, 1913.

7—Telephone Development—Urban and Rural EUROPE AND UNITED STATES January 1, 1913

Countries	Operated by	Number of Stations		Stations per 100 Population	
		In cities of over 100,000 population	Outside of cities of over 100,000 population	In cities of over 100,000 population	Outside of cities of over 100,000 population
Austria	G.	83,404	77,826	2.6	.30
Belgium	G.	39,345	19,295	1.8	.36
Bosnia*	G.	—	850	—	.04
Bulgaria*	G.	1,000	2,200	1.0	.05
Denmark (March 31, 1913)	P.	50,802	67,596	8.4	3.10
Finland	P.	9,472	25,728	6.3	.84
France	P.	137,018	156,177	2.3	.47
German Empire	G.	683,948	618,724	4.6	1.20
Great Britain (March 31, 1913)	G.	550,283	188,455	2.6	.75
Greece	G.	854	2,243	.5	.09
Hungary	G.	25,972	49,766	2.6	.25
Italy	P.	46,211	42,955	1.2	.14
Luxemburg	G.	—	3,910	—	1.48
Netherlands	P.	42,867	34,328	3.0	.74
Norway*	P.	18,903	56,097	7.6	2.58
Portugal	P.	6,868	1,172	1.1	.02
Roumania*	G.	4,700	16,300	1.4	.24
Russia	P.	167,777	114,704	2.0	.09
Servia	G.	—	3,606	—	.12
Spain*	P.	12,475	21,525	.6	.12
Sweden	P.	92,695	124,859	17.7	2.46
Switzerland	G.	28,350	62,223	6.0	1.85
Other places*	P.	—	1,880	—	.03
Total Europe	P. G.	2,002,944	1,692,419	3.0	.44
Total United States	P.	3,027,375	5,702,217	11.4	8.17

P.—Private Companies

G.—Government

P. G.—Private Companies and Government

*Partly estimated

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*American Telephone and Telegraph Co. 1914
Brief of arguments against public ownership
Suppl. 23A*

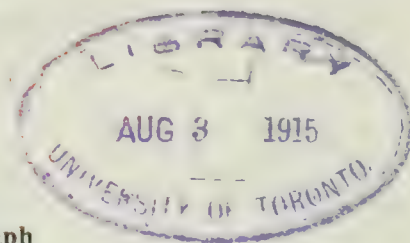
TELEPHONE & TELEGRAPH STATISTICS OF THE WORLD

JANUARY 1, 1914

SUPPLEMENT No. 23A
FOR
BRIEF OF ARGUMENTS
AGAINST
PUBLIC OWNERSHIP

CONTENTS

1. Development—Telephone
2. Wire Mileage—Telephone and Telegraph
3. Gross Earnings—Telephone and Telegraph
4. Plant Investment—Telephone
5. Telephone Development of Important Cities
6. Telephone Development—Urban and Rural



Note: For the completeness of these statistics we are indebted to the courtesy of foreign governments and private companies, to whom many thanks are due.

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14/9/15*

BULLETIN No. 4
Issued May, 1915

(Superseding the corresponding statistics for
January 1, 1913 given in Bulletin No. 2 issued
April, 1914)

AMERICAN TELEPHONE AND TELEGRAPH COMPANY
OFFICE OF STATISTICIAN
NEW YORK CITY

1—Telephone Development of the World, by Countries

JANUARY 1, 1914

	Number of Telephones			Per Cent. of Total World	Telephones per 100 Population	Population per Square Mile
	Government Systems	Private Companies	Total			
NORTH AMERICA:						
United States	—	9,542,017	9,542,017	64.09%	9.7	33.
Canada	106,183	393,591	499,774	3.36%	6.5	2.
Central America	4,326	3,548	7,874	.05%	0.1	27.
Mexico	1,319	40,542	41,861	.28%	0.3	20.
Other No. Am. Places*	20	2,318	2,338	.02%	0.7	0.4
West Indies:						
Cuba	299	15,798	16,097	.11%	0.7	49.
Porto Rico	300	4,088	4,388	.03%	0.4	342.
Other W. I. Places*	2,018	4,581	6,599	.04%	0.1	114.
Total.....	114,465	10,006,483	10,120,948	67.98%	7.5	16.
SOUTH AMERICA:						
Argentina	—	74,296	74,296	.50%	0.9	8.
Bolivia	—	2,500	2,500	.02%	0.1	4.
Brazil	1,165	38,018	39,183	.26%	0.2	7.
Chile (July 31, 1914)	—	19,709	19,709	.13%	0.6	12.
Colombia	—	3,177	3,177	.02%	0.1	12.
Ecuador	481	2,445	2,926	.02%	0.2	13.
Paraguay	129	370	499	.01%	0.1	4.
Peru*	—	4,000	4,000	.03%	0.1	7.
Uruguay	—	13,599	13,599	.09%	1.0	18.
Venezuela	341	4,688	5,029	.03%	0.2	7.
Other Places (incl. Falkland Is.)	1,413	—	1,413	.01%	0.3	2.
Total.....	3,529	162,802	166,331	1.12%	0.3	8.
EUROPE:						
Austria	172,344	—	172,344	1.16%	0.6	253.
Bosnia*	1,200	—	1,200	.01%	0.1	101.
Belgium*	65,000	—	65,000	.44%	0.9	672.
Bulgaria	3,608	—	3,608	.02%	0.1	110.
Denmark (March 31, 1914)	1,586	127,691	129,277	.87%	4.5	189.
France*	330,000	—	330,000	2.22%	0.8	192.
German Empire	1,420,100	—	1,420,100	9.54%	2.1	323.
Great Britain (March 31, 1914)	780,512	—	780,512	5.24%	1.7	381.
Greece*	3,200	—	3,200	.02%	0.1	104.
Hungary	84,040	—	84,040	.56%	0.4	170.
Italy (June 30, 1913)	61,978	29,742	91,720	.62%	0.3	311.
Luxemburg	4,239	—	4,239	.03%	1.6	268.
Netherlands	76,267	10,223	86,490	.58%	1.4	471.
Norway*	40,120	42,430	82,550	.55%	3.4	20.
Portugal	1,203	7,647	8,850	.06%	0.2	165.
Roumania*	20,000	—	20,000	.13%	0.3	141.
Russia (European)	157,710	162,148	319,858	2.15%	0.2	73.
Finland*	—	40,000	40,000	.27%	1.2	26.
Servia*	3,700	—	3,700	.02%	0.1	134.
Spain*	2,722	31,278	34,000	.23%	0.2	105.
Sweden	158,171	74,837	233,008	1.56%	4.1	36.
Switzerland	96,624	—	96,624	.65%	2.5	251.
Other Places	1,485	904	2,389	.02%	0.1	57.
Total.....	3,485,809	526,900	4,012,709	26.95%	0.8	121.
ASIA:						
British India	6,504	11,193	17,697	.12%	0.01	227.
China*	13,517	13,492	27,009	.18%	0.01	167.
Japan (March 31, 1914)	219,551	—	219,551	1.47%	0.4	356.
Russia (Asiatic)	9,423	7,181	16,604	.11%	0.1	3.
Other Places*	22,110	3,114	25,224	.17%	0.01	29.
Total.....	271,105	34,980	306,085	2.05%	0.04	53.
AFRICA:						
Egypt	4,949	12,310	17,259	.12%	0.1	31.
Union of South Africa.....	28,889	—	28,889	.19%	0.5	13.
Other Places*	18,089	859	18,948	.13%	0.02	11.
Total.....	51,927	13,169	65,096	.44%	0.05	12.
OCEANIA:						
Australia	137,485	—	137,485	.92%	2.8	2.
Dutch East Indies*	11,393	3,450	14,843	.10%	0.04	51.
Hawaii	—	7,284	7,284	.05%	3.5	32.
New Zealand (March 31, 1914)	49,415	—	49,415	.33%	4.6	10.
Philippine Islands	1,779	4,979	6,758	.05%	0.1	75.
Other Places*	1,371	225	1,596	.01%	0.1	8.
Total.....	201,443	15,938	217,381	1.46%	0.4	13.
Total World	4,128,278	10,760,272	14,888,550	100.00%	0.9	33.

*Partly estimated.

2—Telephone and Telegraph Wire of the World, by Countries

JANUARY 1, 1914

		Miles of Telephone Wire			Miles of Telegraph Wire (See Note)		
	Service Operated by	Number of Miles	Per Cent. of Total World	Per 100 Population	Number of Miles	Per Cent. of Total World	Per 100 Population
NORTH AMERICA:							
United States	P. P.	22,137,479	59.29%	22.6	1,849,196	33.33%	1.9
Canada	P. G. G.	1,149,480	3.08%	15.0	193,277†	3.48%	2.5
Central America	P. G. G.	13,614	.04%	0.2	15,713	.28%	0.3
Mexico	P. G. G.	98,213	.26%	0.7	49,169	.89%	0.3
Other No. Am. Places*	P. G. G.	2,552	.01%	0.8	6,048	.11%	1.8
West Indies:							
Cuba	P. G. G.	37,163	.10%	1.7	12,660	.23%	0.6
Porto Rico	P. G. G.	6,332	.02%	0.5	664†	.01%	0.06
Other W. I. Places*	P. G. G.	13,367	.03%	0.3	2,551	.05%	0.05
Total.....		23,458,200	62.83%	17.4	2,129,278	38.38%	1.6
SOUTH AMERICA:							
Argentina	P. P.	239,478	.64%	2.8	142,153	2.56%	1.6
Bolivia	P. P. G.	1,302	.00%	0.05	5,979	.11%	0.2
Brazil	P. P. G.	110,360	.30%	0.5	38,304	.69%	0.2
Chile (July 31, 1914)	P. P. G.	37,891	.10%	1.1	23,000*	.41%	0.7
Colombia	P. P. G.	5,094	.01%	0.09	11,860	.21%	0.2
Ecuador	P. P. G. G.	2,539	.01%	0.2	5,384	.10%	0.4
Paraguay	P. P. G. G.	430	.00%	0.05	4,367	.08%	0.5
Peru*	P. P. G.	11,000	.03%	0.2	9,315	.17%	0.2
Uruguay	P. P. G.	26,468	.07%	2.0	5,597	.10%	0.4
Venezuela	P. P. G.	12,069	.03%	0.4	5,291	.10%	0.2
Other Places (incl. Falkland Is.)	P. G. G.	2,957	.01%	0.7	740	.01%	0.2
Total.....		449,588	1.20%	0.8	251,990	4.54%	0.5
EUROPE:							
Austria	G. G.	357,693	.96%	1.2	150,840	2.72%	0.5
Bosnia*	G. G.	1,500	.00%	0.08	7,000	.13%	0.4
Belgium*	G. G.	215,000	.58%	2.8	28,000	.50%	0.4
Bulgaria	G. G.	8,320	.02%	0.2	11,171	.20%	0.2
Denmark (March 31, 1914)	P. G. G.	342,301	.92%	12.0	8,191	.15%	0.3
France*	G. G.	1,200,000	3.21%	3.0	381,000	6.87%	1.0
German Empire	G. G.	4,548,339	12.18%	6.7	459,811	8.29%	0.7
Great Britain (March 31, 1914)	G. G.	2,581,895	6.91%	5.6	313,166	5.64%	0.7
Greece*	G. G.	5,700	.02%	0.1	11,000	.20%	0.3
Hungary	G. G.	281,299	.75%	1.3	99,802	1.80%	0.5
Italy (June 30, 1913)*	P. G. G.	195,000	.52%	0.6	129,500	2.33%	0.4
Luxemburg	G. G.	4,500	.01%	1.7	1,355	.02%	0.5
Netherlands	P. P. G.	225,025	.60%	3.6	24,868	.45%	0.4
Norway	P. P. G.	181,567*	.49%	7.4	13,211	.24%	0.5
Portugal*	P. P. G.	27,500	.07%	0.5	14,500	.26%	0.3
Roumania*	G. G.	70,000	.19%	0.9	16,000	.29%	0.2
Russia and Finland	P. P. G.	716,000*	1.92%	0.5	500,491°	9.02%	0.3
Servia*	G. G.	7,100	.02%	0.2	5,250	.09%	0.1
Spain*	P. P. G.	68,000	.18%	0.3	56,500	1.02%	0.3
Sweden	P. P. G.	510,573	1.37%	9.1	42,194	.76%	0.7
Switzerland	G. G.	249,343	.67%	6.4	16,476	.30%	0.4
Other Places*	P. P. G.	3,495	.01%	0.09	2,295‡	.04%	0.1
Total.....		11,800,240	31.60%	2.5	2,292,621	41.32%	0.5
ASIA:							
British India	P. P. G.	81,300	.22%	0.03	282,424	5.09%	0.1
China	P. P. G.	95,000*	.25%	0.03	52,146	.94%	0.02
Japan (March 31, 1914)	G. G.	490,821	1.31%	0.9	106,946	1.93%	0.2
Russia (Asiatic)	P. P. G.	28,277*	.08%	0.1	—	—	—
Other Places*	P. P. G.	63,928	.17%	0.04	102,193‡	1.84%	0.06
Total.....		759,326	2.03%	0.09	543,709	9.80%	0.07
AFRICA:							
Egypt	P. P. G.	68,484	.19%	0.6	12,622	.23%	0.1
Union of South Africa	G. G.	85,707	.23%	1.4	54,201	.98%	0.9
Other Places*	P. P. G.	34,189	.09%	0.03	109,537	1.97%	0.09
Total.....		188,380	.51%	0.1	176,360	3.18%	0.1
OCEANIA:							
Australia	G. G.	485,725	1.30%	10.0	108,931	1.97%	2.2
Dutch East Indies	P. P. G.	57,596*	.15%	0.2	12,929	.23%	0.03
Hawaii	P. P.	19,724	.06%	9.6	—	0.00%	0.0
New Zealand (March 31, 1914)*	G. G.	97,904	.26%	9.1	25,892	.47%	2.4
Philippine Islands	P. P. G.	17,708	.05%	0.2	4,600	.08%	0.05
Other Places*	P. P. G.	3,517	.01%	0.1	1,790	.03%	0.07
Total.....		682,174	1.83%	1.2	154,142	2.78%	0.3
Total World.....		37,337,908	100.00%	2.2	5,548,100	100.00%	0.3

Note: Telegraph service is operated by Governments, except in the United States.

P.—Private Companies.

G.—Government.

P. G.—Private Companies and Government. See Table 1 for statistics as to proportion of telephones operated by Government.

*Asiatic Russia included in European Russia.

*Partly estimated.

‡European Turkey included in Asiatic Turkey.

†June 30, 1914.

3—Telephone and Telegraph Gross Earnings of the World, by Countries

FISCAL YEAR 1913

(Estimated where necessary)

		Gross Earnings			Per Cent. of Total		Telephone Earnings per Telephone
		Telephone	Telegraph (See Note)	Total	Telephone	Telegraph	
		Service Operated by					
NORTH AMERICA:							
United States	P.	\$305,400,000	\$51,300,000	\$356,700,000	85.6%	14.4%	\$33.00
Canada*	P. G.	16,400,000	5,568,000	21,968,000	74.7%	25.3%	35.30
Central America	P. G.	300,000	1,825,000	2,125,000	14.1%	85.9%	40.20
Mexico	P. G.	1,198,000	1,208,000	2,406,000	49.8%	50.2%	29.50
Other No. Am. Places	P. G.	66,700	121,200	187,900	35.5%	64.5%	29.90
West Indies:							
Cuba	P. G.	957,000	419,000	1,376,000	69.5%	30.5%	68.10
Porto Rico	P. G.	219,100	49,100	268,200	81.7%	18.3%	58.00
Other W. I. Places	P. G.	168,400	84,600	253,000	66.6%	33.4%	28.20
Total		\$324,709,200	\$60,574,900	\$385,284,100	84.3%	15.7%	\$33.10
SOUTH AMERICA:							
Argentina	P.	\$ 3,756,000	\$ 5,473,000	\$ 9,229,000	40.7%	59.3%	\$54.40
Bolivia	P.	66,000	142,000	208,000	31.7%	68.3%	26.40
Brazil	P. G.	1,500,000	4,045,000	5,545,000	27.1%	72.9%	47.50
Chile	P.	823,000	482,000	1,305,000	63.1%	36.9%	39.50
Colombia	P.	90,000	464,000	554,000	16.2%	83.8%	36.20
Ecuador	P. G.	66,000	106,000	172,000	38.4%	61.6%	23.50
Paraguay	P. G.	22,000	57,000	79,000	27.8%	72.2%	44.50
Peru	P.	168,000	138,000	306,000	54.9%	45.1%	42.00
Uruguay	P.	540,000	154,000	694,000	77.8%	22.2%	46.80
Venezuela	P. G.	211,000	198,000	409,000	51.6%	48.4%	43.60
Other Places (incl. Falkland Is.)	G.	21,500	11,000	32,500	66.2%	33.8%	15.50
Total		\$ 7,263,500	\$11,270,000	\$ 18,533,500	39.2%	60.8%	\$47.90
EUROPE:							
Austria	G.	\$ 5,766,700	\$ 3,835,800	\$ 9,602,500	60.1%	39.9%	\$36.30
Bosnia	G.	41,600	222,000	263,600	15.8%	84.2%	37.60
Belgium	G.	3,115,700	1,280,000	4,395,700	70.9%	29.1%	50.40
Bulgaria	G.	107,400	524,100	631,500	17.0%	83.0%	31.30
Denmark	P. G.	2,968,300	538,400	3,506,700	84.6%	15.4%	24.00
France	G.	12,713,200	9,500,000	22,213,200	57.2%	42.8%	40.80
German Empire	G.	46,249,900	9,725,100	55,975,000	82.6%	17.4%	34.00
Great Britain	G.	30,462,900	15,165,900	45,628,800	66.8%	33.2%	40.10
Greece	G.	60,900	420,000	480,900	12.7%	87.3%	29.00
Hungary	G.	3,315,400	2,100,000	5,415,400	61.2%	38.8%	41.50
Italy	P. G.	3,867,800	2,842,900	6,710,700	57.6%	42.4%	43.80
Luxemburg	G.	86,300	22,000	108,300	79.7%	20.3%	21.20
Netherlands	P. G.	2,896,200	1,005,400	3,901,600	74.2%	25.8%	35.00
Norway	P. G.	1,584,600	815,200	2,399,800	66.0%	34.0%	21.60
Portugal	P. G.	317,500	725,000	1,042,500	30.5%	69.5%	43.80
Roumania	G.	456,500	800,000	1,256,500	36.3%	63.7%	23.20
Russia and Finland†	P. G.	10,248,800	17,983,200	28,232,000	36.3%	63.7%	30.70
Servia	G.	111,400	170,000	281,400	39.6%	60.4%	30.50
Spain	P. G.	1,475,000	1,850,000	3,325,000	44.4%	55.6%	50.00
Sweden	P. G.	5,203,000	770,700	5,973,700	87.1%	12.9%	23.40
Switzerland	G.	2,760,000	886,500	3,646,500	75.7%	24.3%	29.50
Other Places	P. G.	62,400	29,300	91,700	68.0%	32.0%	27.80
Total		\$133,871,500	\$71,211,500	\$205,083,000	65.3%	34.7%	\$35.00
ASIA:							
British India	P. G.	\$ 772,400	\$ 3,698,900	\$ 4,471,300	17.3%	82.7%	\$48.60
China	P. G.	792,000	5,274,300	6,066,300	13.1%	86.9%	33.00
Japan	P. G.	7,273,900	5,276,200	12,550,100	58.0%	42.0%	35.40
Other Places‡	P. G.	1,776,000	1,867,200	3,643,200	48.7%	51.3%	48.00
Total		\$ 10,614,300	\$16,116,600	\$ 26,730,900	39.7%	60.3%	\$37.60
AFRICA:							
Egypt	P. G.	\$ 811,200	\$ 461,000	\$ 1,272,200	63.8%	36.2%	\$48.60
Union of South Africa	G.	1,407,600	2,067,600	3,475,200	40.5%	59.5%	53.00
Other Places	P. G.	561,000	2,081,200	2,642,200	21.2%	78.8%	33.00
Total		\$ 2,779,800	\$ 4,609,800	\$ 7,389,600	37.6%	62.4%	\$46.10
OCEANIA:							
Australia	G.	\$ 4,200,700	\$ 3,958,900	\$ 8,159,600	51.5%	48.5%	\$35.40
Dutch East Indies	P. G.	842,500	752,000	1,594,500	52.8%	47.2%	67.60
Hawaii	P.	333,000	0	333,000	100.0%	0.0%	50.00
New Zealand	G.	1,130,800†	1,627,700	2,758,500	41.0%†	59.0%	24.50†
Philippine Islands	P. G.	238,000	282,900	520,900	45.7%	54.3%	44.80
Other Places	P. G.	42,900	17,300	60,200	71.3%	28.7%	29.60
Total		\$ 6,787,900	\$ 6,638,800	\$ 13,426,700	50.6%	49.4%	\$35.80
Total World		\$486,026,200	\$170,421,600	\$656,447,800	74.0%	26.0%	\$34.00

Note: Telegraph service is operated by Governments, except in the United States.

P.—Private Companies.

G.—Government.

P. G.—Private Companies and Government. See Table 1 for statistics as to proportion of telephones operated by Government.

*Telegraph earnings are for year ended June 30, 1914. Earnings of Pacific Cable Board excluded.

†Earnings from exchange service only. Toll and long distance earnings not reported.

‡Telegraph earnings of Asiatic Russia included in telegraph earnings of European Russia.

4—Telephone Plant Investment of the World, by Countries

JANUARY 1, 1914

(Estimated where necessary)

	Service operated by	Plant Investment	Per Cent. of Total World	Investment per Telephone
NORTH AMERICA:				
United States	P.	\$1,149,900,000	55.03%	\$121
Canada	P. G.	74,466,000	3.56%	149
Central America	P. G.	913,000	.04%	116
Mexico	P. G.	5,264,000	.25%	126
Other North America Places	P. G.	398,000	.02%	170
West Indies:				
Cuba	P. G.	3,858,000	.19%	240
Porto Rico	P. G.	621,000	.03%	142
Other West Indies Places	P. G.	844,000	.04%	128
Total		\$1,236,264,000	59.16%	\$122
SOUTH AMERICA:				
Argentina	P.	\$ 15,800,000	.76%	\$213
Bolivia	P.	375,000	.02%	150
Brazil	P. G.	11,013,800	.53%	281
Chile	P. G.	2,153,000	.10%	109
Colombia	P.	336,600	.01%	106
Ecuador	P. G.	377,000	.02%	129
Paraguay	P. G.	70,800	.00%	142
Peru	P.	531,600	.02%	133
Uruguay	P.	1,608,000	.08%	118
Venezuela	P. G.	1,092,800	.05%	217
Other Places (incl. Falkland Is.)	G.	158,400	.01%	112
Total		\$ 33,517,000	1.60%	\$201
EUROPE:				
Austria	G.	\$ 39,382,000	1.88%	\$234
Bosnia	G.	420,000	.02%	350
Belgium	G.	14,495,000	.69%	223
Bulgaria	G.	658,000	.03%	182
Denmark	P. G.	17,060,000	.82%	132
France	G.	81,840,000	3.92%	248
German Empire	G.	278,340,000	13.32%	196
Great Britain	G.	143,655,000	6.87%	184
Greece	G.	560,000	.03%	175
Hungary	G.	16,388,000	.78%	195
Italy	P. G.	12,092,000	.58%	132
Luxemburg	G.	694,000	.03%	164
Netherlands	P. G.	12,992,000	.62%	150
Norway	P. G.	10,768,000	.52%	140
Portugal	P. G.	1,502,000	.07%	170
Roumania	P. G.	3,500,000	.17%	175
Russia	P. G.	45,583,000	2.18%	143
Finland	P.	4,279,000	.21%	107
Servia	P. G.	925,000	.04%	250
Spain	P. G.	5,100,000	.24%	150
Sweden	P. G.	25,595,000	1.23%	110
Switzerland	P. G.	18,524,000	.89%	192
Other Places	P. G.	372,000	.02%	156
Total		\$ 734,724,000	35.16%	\$186
ASIA:				
British India	P. G.	\$ 2,655,000	.13%	\$150
China	P. G.	4,456,000	.21%	165
Japan	G.	23,597,000	1.13%	107
Other Places	P. G.	5,856,000	.28%	140
Total		\$ 36,564,000	1.75%	\$119
AFRICA:				
Egypt	P. G.	\$ 1,948,000	.09%	\$113
Union of South Africa	G.	8,745,000	.42%	303
Other Places	P. G.	2,653,000	.13%	140
Total		\$ 13,346,000	.64%	\$205
OCEANIA:				
Australia	G.	\$ 24,458,000	1.17%	\$189
Dutch East Indies	P. G.	2,387,000	.12%	161
Hawaii	P.	980,000	.05%	135
New Zealand	G.	6,047,000*	.29%	122*
Philippine Islands	P. G.	1,040,000	.05%	154
Other Places	P. G.	207,000	.01%	130
Total		\$ 35,119,000	1.69%	\$162
Total World		\$2,089,534,000	100.00%	\$140

P.—Private Companies.

G.—Government.

P. G.—Private Companies and Government. See Table 1 for statistics as to proportion of telephones operated by Government.

*Investment in exchange plant only.

5—Telephone Development of Important Cities

EUROPE, AUSTRALIA, NEW ZEALAND, JAPAN AND THE UNITED STATES

JANUARY 1, 1914

Country and City (or Exchange Area)		Population Estimated (City or Exchange Area)	Number of Telephones	Telephones per 100 Population
AUSTRALIA:	Adelaide	201,000	8,720	4.3
	Brisbane	160,000	6,671	4.2
	Melbourne	651,000	27,490	4.2
	Sydney	725,400	34,566	4.8
AUSTRIA:	Lemberg	210,737	4,749	2.3
	Prague	458,195	10,310	2.3
	Triest	239,692	5,324	2.2
	Vienna	2,092,382	64,438	3.2
BELGIUM*:	Antwerp	486,829	8,020	1.6
	Brussels	838,681	21,470	2.6
	Ghent	291,656	2,938	1.0
	Liege	339,937	5,060	1.5
BULGARIA:	Sofia	103,000	1,599	1.5
DENMARK:	Copenhagen	621,000	55,080	8.9
FRANCE*:	Bordeaux	266,000	5,090	1.9
	Lille	223,000	3,826	1.7
	Lyons	547,000	7,039	1.3
	Marselles	565,000	7,735	1.4
	Paris	2,940,000	95,033	3.2
GERMAN EMPIRE:	Berlin	2,363,000	154,800	6.6
	Breslau	545,000	20,573	3.8
	Chemnitz	315,000	10,820	3.4
	Cologne	552,000	26,422	4.8
	Dresden	562,000	25,721	4.6
	Dusseldorf	411,000	19,133	4.7
	Essen	322,000	11,342	3.5
	Frankfort	445,000	28,932	6.5
	Hamburg-Altona	1,310,000	77,322	5.9
	Hannover	323,000	16,194	5.0
	Leipzig	622,000	31,176	5.0
	Magdeburg	294,000	10,201	3.5
	Munich	629,000	34,323	5.5
	Nuremberg	367,000	15,354	4.2
	Stuttgart	306,000	20,929	6.8
GREAT BRITAIN†:	Belfast	475,000	8,580	1.8
	Birmingham	1,145,000	19,780	1.7
	Blackburn	340,000	4,615	1.4
	Bolton	335,000	4,171	1.2
	Bradford	475,000	12,243	2.6
	Bristol	440,000	9,056	2.1
	Dublin	455,000	9,692	2.1
	Edinburgh	515,000	15,258	3.0
	Glasgow	1,190,000	40,849	3.4
	Leeds	590,000	10,864	1.8
	Liverpool	1,160,000	34,053	2.9
	London	7,300,000	258,895	3.5
	Manchester	1,255,000	31,443	2.5
	Newcastle	650,000	11,561	1.8
	Nottingham	470,000	8,574	1.8
	Sheffield	715,000	11,354	1.6
GREECE*:	Athens	167,000	854	0.5
HUNGARY:	Budapest	880,000	27,944	3.2
	Szegedin	118,000	1,500	1.3
ITALY‡:	Milan	599,000	12,709	2.1
	Naples	723,000	4,774	0.7
	Palermo	342,000	1,586	0.5
	Rome	539,000	11,719	2.2
	Turin	428,000	6,217	1.5
JAPAN:	Kobe	440,766	5,892	1.3
	Kyoto	508,068	10,447	2.1
	Nagoya	447,951	5,696	1.3
	Osaka	1,387,366	21,787	1.6
	Tokio	2,445,048	43,681	1.8
	Yokohama	424,369	4,825	1.1
NETHERLANDS:	Amsterdam	595,000	17,212	2.9
	The Hague	302,000	12,823	4.2
	Rotterdam	459,000	13,630	3.0
NEW ZEALAND†:	Auckland	109,300	6,722	6.2
	Christchurch	86,140	4,927	5.7
NORWAY‡:	Christiania	247,488	20,699	8.4
PORTUGAL:	Lisbon	435,000	5,394	1.2
ROUMANIA*:	Bucarest	338,000	4,983	1.5
RUSSIA:	Kief	506,060	5,143	1.0
	Lodz	415,604	4,503	1.1
	Moscow	1,617,157	49,848	3.1
	Odessa	620,155	7,712	1.2
	Petrograd	2,018,596	54,815	2.7
	Warsaw	872,478	31,952	3.7
SPAIN*:	Barcelona	587,000	4,547	0.8
	Madrid	600,000	4,365	0.7
SWEDEN:	Goteborg (Gothenburg)	178,030	13,672	7.7
	Stockholm	354,783	85,641 ^Δ	24.1 ^Δ
SWITZERLAND:	Basel	140,000	7,669	5.5
	Zurich	201,000	13,565	6.7
UNITED STATES:	Total of the 12 cities with over 500,000 population.....	16,330,000	1,849,518	11.3
	Total of the 33 cities with over 200,000 population.....	23,000,900	2,749,785	12.0

*Statistics as of January 1, 1913.

†Statistics as of March 31, 1914.

‡Statistics as of June 30, 1913.

^Δ70% of this development is secured by a private company.

6—Telephone Development—Urban and Rural

EUROPE, AUSTRALIA, NEW ZEALAND, JAPAN, AND THE UNITED STATES

JANUARY 1, 1914

Countries	Service Operated by	Number of Telephones		Telephones per 100 Population	
		In cities of over 100,000 population	Outside of cities of over 100,000 population	In cities of over 100,000 population	Outside of cities of over 100,000 population
Austria	G.	95,053	77,291	2.8	0.30
Bosnia*	G.	—	1,200	—	0.06
Belgium*	G.	43,600	21,400	2.0	0.39
Bulgaria	G.	1,599	2,009	1.5	0.04
Denmark (March 31, 1914)	P. G.	55,080	74,197	8.9	3.33
France*	G.	154,000	176,000	2.6	0.52
German Empire	G.	743,246	676,854	4.9	1.29
Great Britain (March 31, 1914)	G.	579,686	200,826	2.6	0.83
Greece*	G.	900	2,300	0.3	0.06
Hungary	G.	29,444	54,596	3.0	0.27
Italy (June 30, 1913)	P. G.	53,937	37,783	1.3	0.12
Luxemburg	G.	—	4,239	—	1.59
Netherlands	P. G.	46,777	39,713	3.2	0.84
Norway*	P. G.	20,699	61,851	8.4	2.82
Portugal	P. G.	7,647	1,203	1.2	0.02
Roumania*	G.	5,200	14,800	1.5	0.20
Russia	P. G.	200,029	119,829	2.1	0.08
Finland*	P.	9,957	30,043	6.5	0.96
Servia*	G.	—	3,700	—	0.08
Spain*	P. G.	12,850	21,150	0.6	0.12
Sweden	P. G.	99,313	133,695	18.6	2.62
Switzerland	G.	30,177	66,447	6.3	1.96
Other Places	P. G.	0	2,389	0.0	0.09
Total Europe		2,189,194	1,823,515	3.0	0.45
Australia	G.	83,807	53,678	4.5	1.77
New Zealand (March 31, 1914)	G.	6,722	42,693	6.2	4.40
Japan (March 31, 1914)	G.	99,645	119,906	1.5	0.26
United States	P.	3,339,806	6,202,211	11.9	8.88

*Partly estimated.

P.—Private Companies.

G.—Government.

P. G.—Private Companies and Government. See Table 1 for statistics as to proportion of telephones operated by Government.

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*American Telephone and Telegraph Co.
List of documents and list of
Suppl. 25*

Why Governments Fail in Commercial Enterprises:

The Fiscal Barrier Between
Plan and Execution



BY

A. LINCOLN LAVINE

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American Telephone and Telegraph Company
Commercial Engineer's Office
New York

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Why Governments Fail in Commercial Enterprises:

The Fiscal Barrier Between Plan and Execution

By A. LINCOLN LAVINE

Some time ago, a printing plant in Cincinnati, Ohio, belonging to one of the largest business organizations in the world, shut down for lack of funds. The manager temporarily relinquished his duties, the clerks lounged around, the printing hands hovered idly about the presses or didn't come to work at all. The salary of all the "workers" continued, but no work was turned out, because there was no money on hand to run the establishment. Yet the annual business of this concern amounts to \$250,000,000.

In another branch of this same concern, in New York City, two time recording clocks lay unused for three months. During all that time there was no money to be had for their repair. Ten dollars would probably have repaired the clocks. The concern owning them was gathering in a daily revenue of more than two-thirds of a million dollars. But the clocks remained useless. There was not even ten cents on hand available for their repair.

The name of the concern in question is the United States Post Office Department. The instances cited above are but photographs in miniature, taken, for convenience, to illustrate what is going on year in and year out on a vastly larger scale, not only in the Post Office Department, but in every other department of government. The worst of it is, it is not easy to point out, in this situation, the political sins of omission or commission which go to make up the legitimate prey of the muckraker. The suspended print shop and neglected time-recording clocks are less symptoms of a curable disorder, than normal characteristics of a peculiar system. They are simply the result of a natural law, which permeates every branch of governmental endeavor, and which, like Banquo's ghost, "will not down."

This law is the offspring of two forces, a fiscal theory, and a political practice: both apparently necessary to run a government, both ever present in all governments, and both fatal in leaving a vulnerable spot in the government's make-up, an Achilles' heel, which seems to place a definite limitation upon what a government can do, and do well.

The fiscal theory is, that not a stitch of governmental work can be done—not a dollar spent—without some definite appropriation therefor; so that if, (as was actually the case a few years ago), the traveling allowances of the officials of the railway mail service, whose duties consist in personal inspection of the efficiency and needs of the service, happen to reach the limit set by the appropriations, the men are compelled to quit work absolutely, although this in no way hinders them from later collecting salaries for the work they didn't do.

The political practice is, that—no matter how much time and toil and money may have been expended instructing Congress as to the wants of the departments—when the time comes to respond, the voting of appropriations is governed not by the actual needs of the service, but by the political needs of the moment. Secretaries of the Treasury, professors of political economy and other fiscal experts have heaped up a veritable mound of literature, calling attention to the situation, and urging some kind of reform; but unfortunately the fact remains, that those who hold the government purse-strings are not, and cannot be, in a position to do intelligent spending.

To illustrate, let us see how Uncle Sam lays out his dollars in taking care of his various enterprises.

Congress, upon assembling each year in December, receives a "Letter from the Secretary of the Treasury." This "letter" is a document of no mean bulk, full of statistics purporting to show how much money the government will have to spend during the coming year to run its business. The document is technically referred to as the Annual Estimates. Now, no Congressman imagines for a minute that these Estimates represent the Secretary of the Treasury's mature and deliberate judgment of what it should cost to run the government for the coming year. Every Congressman knows just how the formidable array of statistics presented to Congress was got up. He knows that the imposing tables of figures were prepared by the various departments at the beginning of their various tasks shortly after July 1st; that the bureaus proceeded solely upon the basis of the current year to guess at their probable needs for a financial year which was not to begin for twelve months to come, and not to end until almost two calendar years had elapsed after the time when the work on the estimates began. He knows, what is more, that the Secretary of the Treasury has practically no say whatever in getting up the estimates,—that, for instance, if the War Department should multiply or divide by ten its previous estimate for river and harbor expenditure, the Secretary must remain silent, and embody the estimate in his "letter."

It is not surprising, therefore, that when the Estimates are passed on to the House appropriation committees, they are treated as a mere collection of guesses, not to be taken seriously, and to be used as a guide—the roughest of guides—only when political considerations are absent. But political considerations are rarely absent. Only too often, when the needs of a service have become exceedingly pressing, special estimates are compiled after long and scientific study, after laborious and expensive research, to be lightly tossed aside by the appropriation committee, because political expediency at the time happens to run counter to the needs of the service. But this is not all. When the nominal needs of the service have adventured through the committees and are presented to the House, they are subjected to the fire of new influences, new opinions, new and extended possibilities of political pressure. And when, in their modified, battered or distorted form, they have passed through the House, they must run the gauntlet of the Senate. Then the Executive approves or disapproves.

The results, of course, are natural. Illustrations are constantly recurring. Not long ago, a great transatlantic steamer struck bottom in New York harbor. Most people called it an "accident." It was not an accident. It was a direct result. The money which should rightly have gone to the improvement of that harbor had been diverted, in the name of political expediency, to the scooping out of some useless bayou, which never will be a harbor, and which, if it could be made one, would never be used. Had this been up to a private company, a great hue and cry would have been raised, and rightly so. The private company would have been held strictly accountable. But the government was able to ignore an important public need with perfect impunity, and escape any accountability for the direct result of a discriminatory diversion of funds.

This is only one of countless examples. Under our system of government, a small majority of either house, or the Executive, may, by cutting off financial support, starve or temporarily paralyze any important public need. Take so vital a branch of government activity as the federal civil service commission. Not only its vigorous administration, but its very existence, is being threatened annually, not by the repeal of the law under which it exists,—for that would not be tolerated by the sentiment of the country,—but by a small crowd in one house temporarily securing sufficient power to jeopardize its fiscal support. It takes constant lobbying on the part of its friends to keep it from this form of submersion. This is even true of state legislatures. In the state of Colorado, a few years ago, the civil service work was absolutely abolished by a failure of the legislature to provide the necessary appropriation.

All this does not mean, necessarily, that the machinery of American government must be remodeled. It is simply an indication of what a government may undertake with profit,—what it may or must do itself, and what it might better leave to others. For when we pass

from the simple and necessary functions of government to those of a commercial nature, difficulties multiply, and evils widen into a sea. The post office business has been taken as an example. Yet the post office, as a business, is comparatively simple. Unlike the railroad, telegraph or telephone, it has practically no "plant" to look after, no complicated equipment to worry about, no intricate organization to maintain. As Professor Daniels, recently appointed Interstate Commerce Commissioner, has pointed out: "Where other enterprises call for venturesomeness and speculative activity, the post office requires orderly routine; where the former demand much fixed capital, the post needs comparatively little; where in ordinary business transactions prices vary for the same service, the post office has always one price for the same service; * * * where the freight agent is puzzling over a complicated tariff, the postal clerk has the same simple regulations to guide him today and tomorrow."

There is no need to theorize on this subject. Foreign governments have furnished a striking object lesson of this truth, for which chapter and verse can be cited. If we take a single utility, the telephone, and trace its management under the various foreign governments which have assumed its operation, we learn a story of neglect and starvation to which this utility has been subjected, with grave and far-reaching results, for which our government, fortunately, can furnish no parallel.

The telephone service in Great Britain is operated by the government, which assumed complete control about two years ago. The rapid deterioration in telephone service which has followed, has raised a veritable storm of protest and disapprobation, which even the strongest opponents of Government Ownership did not dare to predict. The British press teems with editorial attacks upon the management, with letters from irate subscribers bitterly condemning the service, with accounts of delays, mismanagement and confusion in the handling of the enterprise by the government. All this is heaped upon the head of the Postmaster-General, who has charge of the service. Members of Parliament protest in heated speeches, and blame the Postmaster-General; Chambers of Commerce send deputations laden with petitions, and blame the Postmaster-General; writers satirize, speakers anathematize, and business men expostulate,—and all blame the Postmaster-General. Only the Postmaster-General himself, perhaps, and one or two of the more sober members of Parliament, realize that the trouble with the service has been the trouble with the government itself. The Honorable C. S. Goldman, M. P., has put the whole matter in a nutshell:

"Telephones in this country were a private commercial venture. The Government owned the telegraph and tried to throttle the telephone. In 1892 the Government forced the company to sell its trunk lines, and although it has made a parade of figures showing the large amount of mileage of trunk lines added, the service has never kept pace with public requirements, and there has been a constant stream of complaints from Chambers of Commerce and other public bodies, as well as from individual users. The truth is the

Government made a Cinderella of the trunk lines, to the end that their favoured telegraph should remain the belle of the wires.

"In 1898 they went further. They themselves started competing in London, and cajoled provincial municipalities to do the same. Disappointment and failure again! But a harassing failure to the Telephone Company and the customers of all services. So in 1904 an agreement was made to purchase in 1911 the company's undertaking. As to the price, I say nothing. I am merely thinking of public convenience and an efficient service. But as to the Government's inaction between 1904, when they became potential purchasers, and 1911, when they were actual possessors, I have to say much. The company had contracted to sell at tramway prices. On that basis they could not be expected to develop and substantially maintain the service. The Government had a price contract with a time fixed, and they had accepted the responsibility for the efficiency of the service in the future. They could and they should have arranged.

"It was the duty of the Government, having assumed by that agreement the responsibility of providing the service from January 1, 1912, to insure that when that time came everything should be in readiness for the great development of the service, which they themselves from time to time stated would take place when they took over the plant. They could and they should have arranged with the National Telephone Company that the company should have continued its normal operations, but that ample provision for the after-purchase period should be made at the expense of the Post Office.

* * * * *

"Beyond the provision of the new exchanges at Avenue and extensions to a few of his own exchanges, there is no evidence that the Post Office took any steps in the matter, and these operations were largely undertaken in order to avoid purchasing the corresponding exchanges of the company—an attempt which was not successful. In fact, what the Government in effect did do was to paralyze the service for seven years, so that they might buy it cheaply, and then—well, every telephone-user knows what he has dropped into. Even the Postmaster-General had to admit that the operations were bungled."

It is the same trouble, the joint off-spring of the fiscal theory and political practice inhering in all governments,—the fatal gap between the public purse and the public plant,—which has been responsible for Great Britain's telephone plight today; so subtle, that few Britons besides Goldman have been able to perceive it; so deep-seated and vital, that all the Postmaster-General's desperate efforts to improve the telephone service have proved of little avail.

If we turn to France, we find the lights and shadows in the picture of government mismanagement still more clearly portrayed. The French government acquired a complete monopoly of the telephone service as early as 1889. The French telephone service is today—if we may accept a characterization made by French government officials themselves,—the worst that can be found in any of the larger civilized countries of the world. The service is so slow and unreliable, that business men frequently employ messengers, instead of resorting to the telephone. In service between cities, communication is often more rapid by railroad than by telephone. And back of it all we find the same reason: lack of systematic financial management, inherent and unavoidable. The head of the telephone service will submit to the Chamber of Deputies a hundred chapters of minute and elaborate

statistics. "We must have so and so many francs for construction and improvement, or the telephone service will continue to deteriorate." The appropriating body will receive the demand, and with it, perhaps, hundreds of chapters of statistics from other departments. Nearly 800 chapters are sometimes submitted by the twelve ministers who constitute the department heads in France. The budget committee is literally swamped with statistics. Even if the members were entirely free from political considerations, they could not possibly frame a proper business judgment on the needs of each service. The outcome is only natural. The telephone administration may ask for an appropriation of a hundred million francs to carry out a wise plan of construction and equipment, which would result in annual economies and bring the telephone service up to the requirements of the public. The call is simple: "A stitch in time, to save ninety and nine." But if the appropriating body considers it better, politically, to expend money for warships, or waterways, or public buildings, the telephone budget will be cut in two, and the telephone department must shift as best it can on "short rations." This may mean no rations at all, for a hundred millions may be an absolute minimum, without the expenditure of which the proposed construction would be useless. Here is the story of Deputy M. T. Steeg, (translated from one of the French Senate Documents):

"The history of the telephone is only the story of successive programs, very brilliantly conceived, but never realized for lack of resources.

"In 1889, after the purchase of the private exchanges, the multiple switch-board appeared in the United States. The Administration should at once have abandoned the old boards which the 'Société Général des Téléphones' had left us. Thus came about the complications and delays which our old Paris subscribers still remember.

"Again in 1894 a program of extension of the telephone system was worked out. This provided for the construction of six new Centrals and was to be carried out within two years.

"Next a new system of operation, introduced in 1900, obliged the Administration to perfect its material. This work, which the Administration promised to finish in a short time, was not even finished in 1905. In fact it never was, for technical progress had then already condemned these former methods of operation. After 1905, the Administration abandoned the ancient conceptions, and the program of 1906 substituted at last the central battery system. But instead of replacing at once the old apparatus with new, the Department tried to transform and adapt existing apparatus, an economy which cost the Paris system three years of bad service.

"The transformed apparatus was worn out at the end of four years but funds to replace it were lacking. The Administration could not borrow the money needed, and, therefore, was forced to resign itself to its fate.

"The flat rate subscription is costly and prohibitive for a large number of individuals. A decision of May 7, 1901, promised a reduction to 300 francs which has never been realized. The preceding government had issued a decree intending to substitute for the flat rate the message rate. For this it needed 33 million francs to carry on the work of building new offices and for installing new apparatus. But where to find the money! As the General Budget refused to advance so large a sum, it was proposed to use the gross receipts of the interurban circuits after reimbursing in a lump sum the depart-

ments. This amount was to be used for reorganizing the Paris system by delaying the development of the provincial telephone lines. The Budget Commission opposed this measure.

"Next M. Millerand took up the study of the bill, completed a program of reforms and was looking for a disinterested person who would lend him the 100 million francs needed to effectuate the plan. Not being able to borrow for the needs of the service the Administration asked the Chamber of Commerce of Paris to do what the Administration itself was incapable of doing."

Sometimes the French government, to make up for its neglect in past years, will furnish an extra heavy appropriation. The result, of course, is not a healthful replenishment, but a glut. Extravagant and careless expenditure become the order of the day. An example of this is the elaborate central station which was recently built in the Rue des Archives, Paris. This structure, which one Frenchman characterized as "the Babylonian palace of Parisian telephony," cost upwards of 7,000,000 francs. Architecturally, it is beautiful. Telephonically, it is a farce. It was built to accommodate a section having 3,000 subscribers. The annual rate of increase in subscribers at that point, as estimated in the French Budget Report, is 120. The two switchboards in this section are designed to accommodate 20,000 subscribers, leaving 17,000 lines unused. On this basis, it will take 140 years before the switchboards will come into full use! "After an attempt such as this," ironically observes the Official Budget Reporter, "will anyone dare to accuse the Administration of lack of foresight?"

A striking example of the starvation-by-neglect tendency of government management is that of the Gutenberg exchange, in Paris. After a dozen years of telephone stagnation—during which period there were years in which no telephone appropriations were made at all, and years when appropriations were so large that they could not be used before they were withdrawn—the government installed the "common battery" system in the Gutenberg exchange. This system had long since been adopted in America; but in France it was still regarded as a new improvement. No sooner was the system installed, than the French government was warned that it should provide adequate electrical protective apparatus to avoid trouble from high-voltage currents. But the warning fell on deaf ears. The government felt that it had spent enough. The result was a conflagration, which completely reduced the exchange to junk and ashes, and left a large section of the city stranded without telephone communication. This, again, was called an "accident," just as the New York Harbor episode was called an "accident." It was not an accident; it was a result.

In Germany, we might expect an exception to the rule. Germany, unlike more democratic countries, is comparatively unburdened with numerous checks and balances, with frequent rotations in office and consequent changes in management and policy. It would be reasonable to assume, at any rate, that if there is any country whose government should approximate the stability and efficiency of private management, Germany is that country. What have been the results?—in

the telephone field, for example, to pursue the illustration which has been adopted.

The German Empire provides a government owned telephone service, in conjunction with a government owned telegraph service. The condition of the German telephone service is best indicated by the circumstance that, in the fall of 1912, the Imperial Administration decided to send three of its engineering officials to America, accompanied (to quote the Berlin cablegram published in the *New York Times*) by "the hopes and prayers of business men and householders." "The trip is undertaken," read the report, "with a view to introducing radical and much-needed reforms in the antiquated German telephone system. Telephones are cheap in Germany, but have few other virtues. The average office and house telephone in the biggest cities costs \$50 a year, and long distance messages, regardless of mileage, cost 25 cents apiece between any points for three minutes. In other respects," the news item goes on to say, "the service is abominable. Telephoning after 10 o'clock at night in cities costs 5 cents extra per conversation, and connections are possible only after a delay of three to five minutes, owing to the reduction of the daytime staff by about 75 per cent."

The German Telephone Administration has been particularly criticized for its lack of adequate toll facilities. The government will usually maintain only as many long distance telephone lines as are sufficient for official purposes, so that if a citizen wants a long distance call immediately, he pays a premium for the privilege. It is not an uncommon occurrence, in Germany, to stand in line for an out-of-town call for hours, only to be told by a government official that the trunks are all engaged.

Apologists have sought to explain away these conditions, by asserting that the telephone service in Germany was never designed to be primarily commercial, but is rather in line with the fulfilment of a military and political function, originated in Bismarck's policy of railway nationalization. The explanation, however, does not possess the merit of explaining, for Germany has tried in vain to place its telephone service on a commercial basis. Its very failure to do this reveals the true cause of German telephone conditions, and only furnishes another illustration of the unavoidable limitation to which all governments are subjected, by the controlling principle of governmental expenditure. We can get "behind the scenes" if we but glance at the German budgetary appropriations for telephone service through a series of years.

In 1904, the telephone appropriation was 22,000,000 marks. In 1905, it went up to 27,000,000. It continued to go up, in 1906, 1907 and 1908, to 38,000,000 to 45,000,000 and, finally, to 59,000,000. Then, just as the telephone service was beginning to respond to the increased investment, the appropriation was arbitrarily cut to 42,000,000 marks in 1909, and, again, to 25,000,000 marks in 1910. Naturally, plans were demoralized, the service took a slump, and criticism became widespread.

"A leading German newspaper," said the *New York Press*, in giving an account of the popular dissatisfaction which followed, "points out that of the 25,000,000 marks only 1,700,000 marks is to be used for trunk wires, against 14,000,000 in the previous year, and only 13,000,000 is to be used for extension of the system, while 16,000,000 was asked for that purpose in 1909. With the specified amount of 13,000,000 marks, it is contended, it will require the greatest economy to supply all the required new connections for which there is likely to be a demand. The fact that such a demand will exist is based on figures showing that the number of new stations has increased largely in each year since 1899 except 1908. The appropriation for trunk wires is for the improvement of the long-distance service, and is considered too small because of constantly increasing traffic. * * * It is pointed out that France, by allowing only small amounts for telephone purposes, has come to face the problem of renewing an antiquated system at double cost, and that is construed as a warning to Germany."

All this, however, was of no concern to the Imperial Government; for in 1911, the telephone allowance was cut down still further to 22,000,000 marks. The appropriation, clearly, was not to depend upon telephone requirements: the telephone business was to wait upon the appropriation. It is therefore not difficult to understand why, despite the usual reserve maintained by German newspapers in their criticism of government enterprises, the *Deutsche Zeitung* observes that "Herr Reinhold Kraetke, State Secretary of the Imperial Post Office, doubtless is of the honest opinion that everything is running smoothly under his administration. * * * but the inefficiency of the Berlin telephones continues to increase from year to year, and sooner or later conditions will be as bad as they are in Paris. Whoever has telephoned, or, rather, tried to telephone, in Paris, knows that he fails about ninety-nine times out of a hundred to get the connection. For the most part, central does not answer at all and if, after a long wait, she does answer, she gives the wrong number. And here the matter ends. The time spent in telephoning is so much time wasted. In Berlin, things have not yet reached such a state of demoralization, but they are fast approaching it."

The *Zeitung*, like many of the other German newspapers, saw only the result, and mistook the cause as personal. It is not, of course, Herr Kraetke, nor any other German official, who is responsible for the present condition of the German telephone service, but the *sheer inappropriateness of governmental machinery to the management of a commercial utility upon a commercial basis; an inherent defect, not German, but governmental*. This is strikingly brought out by the following illustration.

For years, the German Telephone Administration has been struggling to effect a single change in policy—the revision of a rate schedule which daily grows more inadequate and troublesome. The rate schedule now in force in Germany was put into effect in 1899. In 1906 the

government awoke to the fact that the rates had become obsolete, and utterly unsuited to the needs of the service. There was rank discrimination between the city and country districts. Complaints innumerable kept pouring in, and business was suffering badly. Ordinarily, a private concern would have been forced to settle the matter in a few months, or a half year at the most. But here is a brief summary of the action taken by the German government:

On March 10, 1906, the Reichstag passed a resolution "that an equitable distribution of costs between city and country districts be introduced." *No action for nearly a year.*

On May 3, 1907, the Reichstag again passed the same resolution. *No action for seven months.*

On December, 1907, the Imperial Telegraph Administration published a "Memorial on the Changing of the Telephone Rate Law," with suggestions as to the changes desired. The plan was submitted to a commission. The commission cut out some of the suggestions, substituted others, and passed the matter back to the Administration. The Administration framed a Revised Bill. *No action for more than a year.*

On February 8, 1909, the Revised Bill was submitted to the Reichstag. The Bill was favorably received by the Reichstag, and turned over to the Budget Committee. Then the Reichstag closed. *No action for eight months.*

On November 29, 1909, the Bill was again submitted to the Reichstag for final consideration. *No action for five months.*

In the latter part of April, 1910, the Reichstag again turned the Bill over to the Budget Committee for report. *No action for seven months.*

On December 6, 1910, the Budget Committee submitted a report, modifying the previous scheme of reform submitted by the Administration. The result was a compromise, to which the Administration agreed, and a new Revised Bill was sent to the Reichstag for a second reading. The Reichstag referred it back again to the Budget Committee. *No action for several months.*

On May 4, 1911, the Bill was again considered by the Budget Committee. A new compromise bill was drawn up, which met with such bitter opposition that the Budget Committee adjourned without reaching a final conclusion.

There has been no report of action since; only the *Zeitschrift für Schwachstromtechnik* in February, 1912, reported the following interesting development: "The make-up of the old Reichstag left little ground for the hope that the proposal for a new telephone-rate law, which was advanced by the Government, would meet with a favorable reception, in spite of the fact that the proposition had undergone drastic changes in the Commission. The recent elections have brought about such a change in the relative strength of the parties, that even that last version of the proposal, for which a majority could have been won in the old Reichstag only with the greatest difficulty, has become utterly hopeless."

Enough has been said, perhaps, to indicate that even Germany, with all the alleged vigor of a monarchical and centralized administration, has been unable to escape the inexorable principle that a government, by the very nature of its make-up, is incapable of attending to a commercial utility with anything like the benefit to the public which can be furnished by private enterprise.

One more example may be cited—that of Australia—because Australian conditions are, in many respects, closely similar to those in the United States. The telephone service in Australia was originally administered by the various states which make up the Commonwealth; but in 1901, the Commonwealth itself assumed entire management of the telephones. It was hoped, by this change, that flagrant evils in the public administration of the services would be eliminated by consolidation under the Commonwealth. But conditions did not improve; if anything, they became worse; so that, after years of mismanagement, public clamor grew so strong that a Royal Commission was appointed to investigate the Post, Telegraph and Telephone service, to determine, if possible, the source of the trouble. The Commission issued its report in October, 1910. On the whole, it is one of the severest arraignments which has ever been made by a body of public officials against government mismanagement of a public utility. But it is particularly noteworthy in this respect: it places the finger precisely on the sore spot of the whole system. This is what the Commissioners found:

"The reason assigned by all the officials for the failure to place the services in proper working order was want of sufficient funds. There is evidence that the Department in 1901 endeavoured, through the Treasurer of the time, to obtain the necessary funds to place the services in an efficient condition by resorting to a loan, but Parliament refused to sanction this proposal. * * * *

"The result of unduly curtailing expenditure was pointed out repeatedly by the Department, and the required provision was made on the Estimates, but was reduced by the Treasurer. The longer reconstruction is deferred and the longer installation of a new system is postponed the more expensive the work becomes, on account of extensions made to the old system. Construction methods were found to be practically the same as in 1901, as the Department claimed it had been impossible to improve those methods since that date, although the adoption of improved methods would obviously have tended towards economy. It may be mentioned that between 1886 and 1904 the New York Telephone Company's plant was reconstructed three times to bring the equipment up to the highest standard, and to render the service more efficient. From 1900 to 1907 the Bell Telephone Company, United States of America, spent about £70,000,000 on telephone undertakings."

The Commission then goes on to describe the antiquated switchboards, ill-kept lines, impaired efficiency and general demoralization in service, which naturally flowed from the policy of financial starvation that characterized the government's management from the start.

And so we might go on, pointing the moral from the other governments which have assumed the telephone business,—Austria, Italy, Switzerland and the rest. It is the same story in each case, recalling, with peculiar aptness, Macaulay's description of Johnson's early contemporaries: "They knew luxury, they knew beggary, but they never knew comfort." The government telephones know extravagance, they know penury, but they never know that continuous and comprehensive financing, without which an adequate service is impossible. In each case we see the same characteristic in varying guises: *an inherent*

incapacity to administer a commercial utility with anything like the efficiency and promptness of which it is capable, all due to a definite and natural limitation to which governments are subject,—as definite and natural as that which has decreed that the brain shall not assume the functions of the stomach, the liver or the heart.

In the United States, happily, the government has retained its natural supervisory function,—that of a brain, if you please. Recognizing that a government is far better able to regulate and check abuses of private corporations, than to regulate and check its own, it has so far steered clear of attempting functions for which, by its very nature, it was never intended; and the result has been decidedly fortunate for Americans. In marked contrast, for instance, to the various governmental telephone services we have described, the high stage of perfection reached by the American telephone service, so admired by foreigners visiting this country, stands out as an illustration of what may be expected when the development of a commercial utility is allowed to proceed along natural lines. And precisely the element which is lacking in governmental administration has been responsible for the efficiency and despatch afforded by private enterprise: the deliberate mapping out of a policy, the laying of plans and the spending of money, not only for the day, not only for the morrow, but for the next year, and the next ten or twenty years. It is clear that this element cannot be present, but for an absolute guaranty of stability for a definite period of time in the future: a complete freedom from the gusts of opposing policies, political or otherwise,—an atmosphere of reasonable expectation that deliberate and painstaking planning will be followed by equally deliberate and painstaking execution.

There is not a government on the face of the earth capable of this sort of management. No government has been able to escape the natural law that all organisms, political as well as individual, have a definite limitation of functions stamped upon them, beyond which they cannot step, save with harm to themselves and others. Numerous arguments have been advanced against government ownership: the impairment to the fundamental and primary functions of government which comes from throwing onto its already overburdened shoulders, new and vastly more complicated duties; the increased opportunities for political corruption; the undue political influence of a growing army of civil service employes, who, by their votes, can force immoderate class legislation at the expense of the public; the undemocratic trend toward centralization, militarism and bureaucracy, with its tendency to subject individual liberty to a petty officialdom; improper rate making forced by political pressure, producing deficits which, through taxation, must fall on user and non-user alike; arbitrary treatment of consumers, inspired by the knowledge that from government there can be no appeal,—all these arguments have been advanced, from time to time, against the proposition of government ownership in this country. But in the last analysis, it will be seen that these considerations

either spring from or center about a primary law,—the natural and inherent limitation of governments: that governments were never intended to create, but to conserve and protect; that a government is most beneficial when it refuses to overstep its natural limitation, and guarantees to a people a minimum of interference with individual liberty, combined with a maximum of protection against individual abuses.

When Socrates said, "Know thyself," he had in mind the disaster which an individual invites when he attempts something Nature never fitted him for. The world is full of misfits in individual vocations: of born artisans who have wasted lives trying to practice law; of dismal failures in the world of art, who might have been fortunate business men; of mediocre journalists, who might have starred in the professions. The personal tragedy, in each case, lay in a failure to realize the personal limitation; in attempting what might better have been left to others. Far more tragic, because more far-reaching and permanent, is it for a government to attempt what it is inherently incapable of doing well.

This country was born simultaneously with the awakening of a new era in human enterprise. Its progress has come from a free and untrammelled expression of the individual. In the course of its development, evils have sprung up,—the evils of individual license. Prominent among them have been the corporate abuses from which the public has suffered in the absence of sufficiently prompt and adequate interference by government. The result has been some sentiment, of late, for ownership, by government, of the more important utilities,—railways, telegraphs and telephones. But we shall profit little indeed if, to right one evil, we establish another more serious. It were far better for government to emulate the example of the human will, which guides and restrains our actions when they become immoderate, instead of assuming the various functions itself.

It is probably this thought that President Woodrow Wilson had in mind, when he said, in his speech before the Federation of Democratic Clubs in Pennsylvania:

"The regulation of corporations is hardly less significant and central. We have made many experiments in this difficult matter, and some of them have been crude, and hurtful, but our thought is slowly clearing. We are beginning to see, for one thing, how public service corporations, at any rate, can be governed with great advantage to the public and without serious detriment to themselves, as undertakings of private capital. Experience is removing both prejudice and fear in this field, and it is likely that within the very near future we shall have settled down to some common rational and effective policy. The regulation of corporations of other sorts lies intimately connected with the general question which ramifies in a thousand directions, but the intricate threads of which we are slowly beginning to perceive constitute a decipherable pattern. Measures will here also frame themselves soberly enough as we think our way forward."

It is to be hoped that, in untangling the "intricate threads" which constitute the "decipherable pattern," the Government of this country will avoid the pitfalls into which foreign governments have dropped, in their assumption of extra-governmental functions. The knot is to be untangled by the deft and trained fingers of scientific government regulation, rather than the knife of government ownership, to the end that, instead of a jangle of frayed and twisted government enterprises, we shall have a complete and harmonious commercial fabric, beneficial to public and public utility alike; and the growing popularity of our public regulating commissions is a hopeful sign that the genius of American institutions is beginning to compass this truth.

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What is Wrong with the Telephone

By C. S. GOLDMAN,

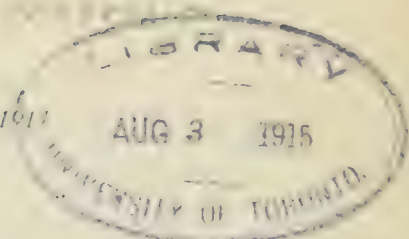
Chairman of (British) Parliamentary Telephone Committee.

The telephone is the most wonderful and least appreciated of the marvels of modern science. It is the very magic carpet of fable, transporting its owner in a flash to the place where he desires to be. By its aid the business man seated in his City office can be one instant instructing his agent at the Docks and the next arguing with his wife at Richmond. The busy housewife can do her shopping without stirring more than a few steps from the nursery door. The electric current will carry the human voice over the North Downs and across the trim gardens of the South, under the waters of the Channel, across the plains of Northern France, and deliver it easily recognizable in Paris in a moment of time. Nor is the means by which this miracle is performed less marvellous than the result. The electric current which operates the telephone is perhaps the gentlest and swiftest thing in the world. Any description of it must seem to be hopeless exaggeration. It is about one five-millionth part of the current required to light a single electric lamp. To use a picturesque illustration of Mr. H. N. Casson's, if you cool a spoonful of hot water one degree you will have released sufficient energy to run a telephone for ten thousand years. If you catch the falling tear of a child you will have enough water-power to carry your voice from London to Paris.

This is a miracle, but in order to make miracles of practical utility in modern life it is required that they should occur when they are wanted, and in the way that is wanted. A magic carpet that suddenly refused to stir when the proper incantation was repeated would become unpopular, and even more annoyance would be caused if, instead of carrying its user to the office where he wanted to be, it pitchforked him, alarmed and angry, into the back drawing-room of a total stranger. That is what the telephone here is constantly doing to-day, with the consequence that people are tempted to attribute to the telephone itself faults which are merely due to the system under which

it is operated. Every nation gets the telephone system that it deserves, and we have fully earned all the exasperation that we have to endure by our persistent refusal to recognize the change which the advent of the telephone has brought to the world. The postal service transmits a letter, the telegraph service sends the contents of the letter, but the telephone communicates the thought behind the letter. There is one great fundamental principle of telephony which is too little regarded in England, and that is that every telephone added to a service increases the value of all telephones in the service. We still do not realize that a house without a telephone is as obsolete as a house without a bathroom. We are still content to be twenty years behind the times in our telephone system.

For an idea of what a telephone system can do we have to look to America. In spite of the fact that it was largely built up by Englishmen, the telephone stands as the one characteristic product of American civilization. Not a very lovely product perhaps, not one which indicates a very high advance in the scale of civilization, but a product which no nation which means to maintain its position in commerce to-day can afford to ignore or even to underestimate. The United States adds in one year to her service as many telephones as are comprised in the entire system in this country, and increases the mileage of her telephone circuits each year by more than the distance between England and Australia. In the States every alternate family possesses a telephone. There the low charge of 9d to one shilling a week for a private instrument has enabled two and a half million farmers to be in telephonic touch with each other and their markets. Contrast this development and these facilities with the opportunities vouchsafed to only two thousand farmers in this country. It is possible to converse from Denver to New York, a distance of over two thousand miles, without straining the voice, and to be perfectly audible. To-day New York leads the world with a



telephone service that is unapproachable for efficiency. If you mass together all the telephones of London, Glasgow, Liverpool, Manchester, Birmingham, Leeds, Sheffield, Bristol and Belfast, you will still fall short of the number of telephones in this one American city. At the slackest time in the twenty-four hours—that is between three and four in the morning—there are, on an average, ten calls a minute. Between eleven and twelve o'clock 180,000 conversations take place, with an average of fifty new calls a second. The business done represents every department of human activity. Contracts are made, evidence given, lawsuits tried, degrees conferred, proposals of marriage made and accepted, voters canvassed—all by means of the telephone. I do not want to labor comparisons, but it is perfectly obvious that here in England we are still content to do things slowly and expensively without the telephone that could be done quickly and cheaply with it. The first thing that strikes an American coming to London is the overcrowding of the streets. He sees streams of messenger boys, clerks, and even business men walking, flying in trains, or going by 'bus or underground. In New York there is not half that overcrowding. Business is not done by letter or message or even by personal interview. It is done by telephone. The London Stock Exchange, the biggest market-place on earth, has fifteen telephone lines; the New York Exchange has 641. A big club of which I am a member has 6000 members and three telephone lines. On an average three hundred men—almost all of them busy professional men, business men, or members of Parliament—lunch there every day. Yet there is only one telephone line for every hundred of them. Every member of the House of Commons has had experience of the exasperating inadequacy of the telephone service there. In Congress every member has his telephone.

I am pointing out these differences not in order to show that England is decadent or that her commercial position is doomed or anything of that kind, but merely to show the English people what they are missing in convenience and comfort by not securing an adequate and efficient service. At the present moment such service as we have is regarded as a luxury for the rich, instead of being accepted as a necessity for all. For every person in the United Kingdom with a telephone there are at least sixty-nine without

This lack of telephones lessens the value of the whole service. My telephone is of no use to me unless the man I want to ring up has got one too. This is where the telephone system here is being hampered. If we had the same telephone service in proportion to our population as the United States have, with its 9,000,000 telephones, we should have about 3,650,000 telephones, instead of only 750,000. In that case every subscriber would have five times the present facilities of conversation. Five telephones to one is too heavy odds for us to allow our commercial rivals to have against us in these days of stress. If we want two keels to one to keep our shores from invasion, we want at least an equal proportion of telephones to keep our business from destruction.

There is a curious idea, which has been extensively spread in some strange way, that America is more suited to telephone exploitation than this country. It is true that in America distances are greater and comparative means of communication less efficient than in this country. But that made the task of linking up America by telephone harder and not easier. In America they had to face and subdue natural obstacles of the most formidable kind. They had to traverse great forests where their poles looked like tooth-picks beside the enormous trees. They had to drive off Indians who coveted the bright wire for ear-rings and bracelets, and the bears who mistook the humming of the wires for the buzzing of bees and persisted in gnawing down the poles. In England we had no such natural difficulties with which to contend. With its natural advantages, its small area, its inter-dependent cities and counties, it is an ideal place for the development of the telephone. Nor can it be held that the fact that other means of communication exist justifies their substitution for the telephone. The use of the telephone is to prevent a man from being his own errand-boy. Because you can do a journey quickly by tube or train you need not neglect the chance of doing it quicker still by telephone.

This fact is not realized in England because the telephone service has always been the Cinderella of English life. Indeed, when we look at the history of the telephone in this country, it seems extraordinary that it has even survived to the extent that it has. When the telephone was first introduced into England it found the Government staggering under one of the

most disastrous financial blows that it had ever received: the failure of the telegraph service to pay its way. The advent of the telephone put Ministers in a difficulty. If they bought it, the result might be that another financial failure might be added to the losses on the telegraphs, which they already felt to be excessive. If they let it alone, it might cut out the telegraph service altogether and leave them to face a total loss of all the public money that they had invested in it. The dilemma appeared to be complete. The Government under these circumstances decided first of all to get control of the new service. They obtained a decision of the Courts that a telephone was a telegraph. The Act of Parliament under which the decision was obtained was passed six years before a telephone was ever constructed, but that made no difference. The leading scientists of the day, including Tyndall and Lord Kelvin, warned the Government that they were making a fatal mistake, but they were disregarded. The Post Office were acting as the wicked uncles of the infant service. They had determined to get control of it in order to do it to death in some hidden and secret manner. Very soon their policy became clear. They were neither prepared to work it themselves nor to allow anyone else a free hand to develop it. The political theorists of that day believed that unrestricted competition was the only way to secure business efficiency. So licenses to organize a telephone service were granted to thirteen different companies. We can faintly imagine the confusion that would have ensued if they had all succeeded, but fortunately, as might have been foreseen, the most alert and most energetic quickly swallowed all the rest. But even this repetition of the miracle of Aaron's rod did not soften the hard and jealous heart of the Postmaster-General, and he would not let the telephone service go free. He even acted so far upon Scriptural precedent as to increase the burden of its obligations. The Company was compelled to pay one-tenth of its gross earnings to the Post-Office. It had to hold itself in readiness to sell out at six months' notice at any time. And finally, when the Company had at last strung a long-distance system of wires, the Government came down and compelled it to sell.

The root cause of this stroke, which has been as disastrous financially as it was immoral politically—the

Post Office made a loss last year of 15,000*l.* over the trunk service—was the jealousy of the telegraph service. For a long time the Post Office telegraphs had been envious of their younger and more popular rival. On the 2nd of March, 1892, the then Postmaster-General, Sir James Fergusson, had to confess in the House of Commons that "wherever the telephone system has been principally developed, there the growth of the telegraph revenue has been checked." Instead of drawing the obvious conclusion, that the public had begun to recognize the increased utility and efficiency of the telephone over the telegraph, and trying to make the new service as popular and convenient as possible, the Post Office adopted the opposite policy. It expropriated at an absurd valuation the whole of the Company's long-distance lines, and imposed the most harassing conditions as to the local areas in which the Company might work. If its object was to get permanent revenue for the State, experience has shown that it dismally failed; but if its object was to check the development of the telephone service in England it was a triumphant success. The result has been not to transform the telegraphs into a paying concern, but to turn the trunk lines into a losing concern—so much for Post Office control.

The next chapter in this miserable story of administrative failure opens in 1900, when the Post Office suddenly repudiated its obligations to the licensed Company and threw open the door to general competition. That action knocked twenty-five per cent. off the value of the National Telephone Company's securities and made its author, Mr. Hanbury, a member of the Cabinet; but it had no other recognizable results. The Post Office tried to start a second system in London, but in two years it discovered its mistake and had to ask the Company for its assistance and co-operation. It granted licenses to cities that demanded municipal ownership, but the policy of mutual throttling and antagonistic rivalries between them, the Company, and the Post Office system resulted in inevitable failure. Glasgow, for instance, spent 360,000*l.* on a plant, ran the system at a loss, and then sold it to the Post Office for 300,000*l.* When it had bought the system the Post Office had to reconstruct the main exchange and replace every one of the 12,800 subscribers' telephones in use. The other municipal telephones came to the same end. Brighton sold out

to the Post Office with a loss of nearly 2500*l*, and other municipalities had to sell to the National Telephone Company at considerably less than the service cost. All this happened because the Post Office would not realize that no telephone service can be complete or efficient unless it is self-contained and unhampered, and unless it is national in its scope. These repeated failures, however, did succeed in driving into the heads of the Postal officials some elementary appreciation of telephone conditions. But, like most lessons learnt by unwilling pupils, it was learned or applied the wrong way. Instead of realizing that the moral of all this confusion was the natural and perfectly comprehensible inability of Post Office officials to understand the special and complicated problem of the telephone, the official came to the conclusion that what was wanted was more instead of less of Post Office control. In 1905 they accordingly forced the Company to agree to a sale of its whole interest in 1911 at "reconstruction value" without any allowance at all for the goodwill of its enormous business. Like many hard bargains, this has proved to be in the end most expensive to those who made it. Once the certainty of appropriation by the Government at unremunerative prices began to overshadow the National Telephone Company, the development of the system was paralyzed. The spirit of enterprise and dash which characterized the early history of the Company was chilled; new districts were not exploited or new plant fitted except where absolutely necessary. The amount of capital expenditure of the Company decreased from over 1,000,000*l*. in 1907 to 360,000*l*. in its last year. Just when British telephony was beginning to recover from the persistent difficulties which Post Office interference had put in its way, the final blow of impending Post Office control destroyed for a decade the hope of an adequate exploitation of the service in this country. The National Telephone Company, always uncertain of the security of its title and hampered by the enormous royalties, amounting in all to 3,670,000*l*., that it was forced to pay to the State, had never been able to expand on generous and far-seeing lines. When it was faced with the certainty of speedy extinction it ceased to make any effort to do so. The service passed into the hands of the Post Office in a depressed and depreciated condition.

It cannot be said that the Post Office made any adequate preparations for its gigantic task. At the time of the transfer Great Britain was hopelessly behind the rest of the world in the provision of telephones. Whereas in Stockholm one man out of every four had a telephone, in Chicago one out of every nine, and in Berlin one out of seventeen, in this country in London only one out of every thirty-five, in Manchester one out of forty-seven, and in Birmingham one out of seventy-two, was so provided. The system was obviously inadequate to meet the expanding needs of an industrial community, and the only possible excuse for the State assuming control was that, with its great resources and absolute freedom from any fear of competition, it might be able to carry out the necessary revolution more swiftly and easily than any private company. But in order to do this a vast army of highly skilled men must be provided and the plans for the change drafted and examined by experts. Canvassers would be required to seek out business, and an educational campaign to instruct the public in the advantages and use of the telephone. Nothing of the kind was done or even contemplated. All that the Post Office could do after five years of preparation was to take over the existing service without dislocating it for more than a fortnight. No skilled men were trained and held in readiness for the needs of the State service. Therefore, instead of the transfer being a stimulus to the expansion of the telephone service it has actually acted as a check. The rate of expansion as shown in the last annual report is only about one-half what it was in 1906, and even so it exceeds the power of the Post Office to cope with it.

In America a new telephone can be installed in four or five days, whereas in this country it will take as many weeks, and in some cases almost as many months. The Post Office authorities quite truly say that without skilled engineers they cannot maintain and extend their service. But that is a difficulty which anyone might have foreseen. What I object to is that, knowing that skilled and trained men would be required, they made no adequate effort to ensure that such would be available when they were required. This is one illustration of the lack of foresight which has always marked their attitude towards the telephone service. When the transfer was effected they got rid

of the highly paid, experienced organizers and engineers at the head of the service and substituted for them comparatively ill-paid officials with no unusual telephone experience. I have nothing whatever to say against any of the existing officials. They do their work admirably under most difficult conditions. But they are probably not selected for having the special talents and experience which are required for running an enormous business enterprise like the telephone service.

The same thing applies to the whole internal organization of the service. The Post Office is destroying its efficiency by trying to force Civil Service methods on to a department for which they are utterly unsuited. It is not usual to pay a Civil servant occupying a certain position more than 1500*l.* a year, so the Chief Engineer cannot be paid more, although the National Telephone Company paid their officials twice the sum. That is the Post Office argument. The business argument is to get the best man and then pay him what he is worth. So with the rest of the staff. Under the private Company they were systematically promoted, wherever they were, so that every loyal servant of the Company was secured a rising income. Now all sorts of grades and classes have been introduced because they are common in the Civil Service, and a telephonist is not paid, as used to be the case, a level rate according to the work done, but a rate forced according to the particular "classification" of the Post Office in which she works. Moreover, it is generally believed among the staff that a judicious mediocrity and scrupulous observance of red-tape regulations are a better guide to promotion than keenness and enterprise. All these things may be small in themselves, but they are big in the result. The staff, instead of being happier under their "model employer," the State, are seething with discontent. Now, the telephone service is run by the nerves and tempers of the operators, and if the human element is dissatisfied and discontented these moods will inevitably be reflected by the machine which they operate. Next to the numbing effect of Post Office interference in the past must be put its stupid misunderstanding of the feelings of the staff, in assessing the blame for the present breakdown of the service.

There is no use now in trying to shut our eyes to the facts. During the whole history of the telephone

in England the Post Office has acted like some kind of bad fairy, always interposing its curse just when the service was struggling out of its difficulty. Impregnable within its walls of bureaucratic obstinacy, the Post Office will accept suggestions from nobody nor heed the exasperated complaints of the subscribers. There is only one possible solution of the difficulty. Post Office methods have dismally failed, and they must be ended. A large number of suggestions have been put forward from time to time for the reform of the service, but I am afraid that none of them now are adequate. The Chamber of Commerce last year pressed, at my invitation, for a separation of the telephone from other departments of the Post Office, so that some relics of the old independence might be preserved from the stifling effects of Civil Service tradition. The Postmaster-General would not hear of it. Then the Parliamentary Telephone Committee suggested the appointment of a general Advisory Committee representing the subscribers, with much the same powers of advice as are possessed by the Advisory Committees of the Board of Trade. That also was refused. Now I think that neither of these suggestions is adequate to meet the case. Since they were put forward we have seen more of the methods and ideas of the Post Office, and I think that the only possible solution of the whole problem is to take the control of the service right away from the Post Office and place it under a board of business men who will run it on commercial lines. We have a precedent for such a body in the Port of London Authority, and I think that if State intervention in commercial enterprise is to be increased that precedent will have to be extensively followed. Something of the same idea is also contained in the suggestions in regard to Irish railways put forward by the recent Viceregal Commission.

The present arrangements are hopelessly unbusinesslike. The finances of the system are involved and obscure to a degree which would not be tolerated in the case of any commercial company. The National Telephone Company was accustomed to issue clear and intelligible accounts a fortnight after the books were closed. The Post Office issues accounts which it is impossible for any man who has not had a special training in Treasury accountancy to understand, and they are not debated for something like eighteen

months after the year to which they refer has expired. Even when the time comes for a discussion it is often farcical in character. Last year the Post Office never condescended to make any reply at all to the criticisms that were directed against it. This year we were more fortunate, but we were unable to obtain from the Postmaster-General any real information as to how the service stands. This much is clear. In two years the Post Office has already managed to dissipate the substantial profit made by the National Telephone Company. The Company paid a royalty to the State of 350,000*l.*; it had to pay income-tax to the extent of 38,000*l.* It had to raise money in the open market and to put by large sums for the redemption of capital. Yet it paid six per cent. to its shareholders. Under Post Office control the profit has been decreased to less than one and a half per cent., representing a total net profit for the year of only 303,000*l.*, although, of course, the Post Office pays no royalties, pays no income tax, and raises money on the full security of the State. That is a record from a financial point of view which amply justifies the demand for the more businesslike control. A business board would, at all events, issue intelligible accounts which would let the subscribers know exactly the financial position of the concern, and would make some provision for allowing them to ventilate their complaints with some prospect of their receiving attention.

At the present moment the Post Office does not realize the two main principles of telephonic success. The first is that the man at the telephone is a man in a hurry. He may consent to wait for any other possible service, but he never will consent to wait for the telephone. For him every second is a minute long because every second may be of vital importance. The Bell Company, in America, has more than once scrapped plant worth thousands of pounds in order to save a few seconds on a call. There a delay of a quarter of an hour in a thousand-mile call is a subject for special investigation. Here the trunk lines, which have been for years under the control of the Post Office, are notorious for their slowness and untrustworthiness, and excessive charges as compared with the Continent. As an instance, the trunk fee in Germany for a distance of 300 miles is 1*s.*, in England it is 2*s.* 6*d.*, which is more than double for the same distance. The constant signal of "Line engaged" or "Number engaged,"

during the busy parts of the day shows that the deficiency of lines between exchanges is almost as bad as the deficiency in trunk lines. Yet the Post Office is taking no adequate steps whatever to lay down the new lines that are necessary for the speeding-up of the service. A business board would recognize that what is wanted is to give a quick service when it is most required, in the busiest time of the day, and would rather lay down trunk lines ahead of immediate requirements than allow the lack of them to hold up the service. The business organizers of the Bell Telephone Company have now got in stock \$25,000,000 worth of reserve plant waiting for the development of the service to require it. Even in the City of New York one-half of the cable ducts are empty, in expectation of the greater city of eight million population which they expect in 1928. Money invested in developing the service is well invested, since by the second principle of telephony every extension adds value to the whole.

The future of the telephone service in this country is in the hands of its subscribers. They are a sufficiently formidable body to enforce their will upon any Postmaster-General. If they are willing to put up with a half-starved, half-grown, neglected and inefficient service, neither cheap nor useful, they can abandon it to the bureaucrats of the Post Office. They have succeeded in losing something like 30,000,000*l.* of the nation's capital and about a million a year of its income in running the telegraph service, and I am sure that they may be equally successful with the telephone. But if the subscribers are really determined to see that this all-important service is developed and expanded to meet the needs of the people, and, in the picturesque language of Mr. Casson, "fitted like a garment round the habits of the people," they will insist that the evil power of the Post Office shall no longer be exercised. The Postmaster-General would retain over the telephones the kind of suzerainty that the Home Secretary has over the present Prison Commissioners or the Lunacy Commissioners, but no more. For the first time in its history the telephone must be given a free hand over the whole country, unhampered by red tape or official restriction. It is not to be supposed that such a change will be effected without vigorous official opposition. We can only get it by acting to Parliament the part of the importunate

widow. If every subscriber who has got a complaint will badger his member and make him in turn badger the Post Office, the Government may yield to weariness what they withheld from reason, and grant the desired concession. Popular disgust throughout the

country with the muddle and inefficiency of the Post Office system, and the autocracy of its methods, is so great that it only needs a little organization to make of it a force that no Government could resist.

C. S. GOLDMAN,
Chairman of Parliamentary Telephone Committee.

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